

**PROPOSED**

Amended Date

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**  
( )

14-xxxE CAB  
File No. 0212-38

Mr. Thomas A. Weber  
Vice President, Kapolei Refinery  
Hawaii Independent Energy, LLC  
91-325 Komohana Street  
Kapolei, Hawaii 96707-1713

Dear Mr. Weber:

**Subject: Amendment of Covered Source Permit (CSP) No. 0212-01-C  
Minor Modification Application No. 0212-38  
One (1) 2,520,000 gallon Denatured Ethanol Tank No. 518  
Hawaii Independent Energy, LLC  
Petroleum Refinery  
Located At: 91-325 Komohana Street, Kapolei, Oahu  
Date of Expiration: March 16, 2015**

In accordance with Hawaii Administrative Rules, Chapter 11-60.1, and pursuant to your application for a Minor Modification dated March 27, 2014, the Department of Health, Clean Air Branch, hereby amends Covered Source Permit (CSP) No. 0212-01-C issued to Hawaii Independent Energy, LLC. The amendment allows the construction and operation of a new Denatured Ethanol Tank No. 518 in the existing covered source permit section for the petroleum storage tanks.

The enclosed amended Attachment II(M): Special Conditions for the Petroleum Storage Tanks supersedes in its entirety the corresponding Attachment II(M) issued with CSP No. 0212-01-C dated March 17, 2010, and amended on January 12, 2012, and March 22, 2013. All other permit conditions issued with CSP No. 0212-01-C shall not be affected and shall remain valid. A receipt for the application filing fee of \$200.00 is enclosed.

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

Sincerely,

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

DL:nn  
Enclosures

**ATTACHMENT II(M): SPECIAL CONDITIONS  
COVERED SOURCE PERMIT NO. 0212-01-C  
PETROLEUM STORAGE TANKS**

**Amended Date:**

**Expiration Date: March 16, 2015**

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; and
    - 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. One (1) - 1,107,535 gallon (nominal) internal floating roof storage tank identified as Tank 109;
    - 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; and
    - vii. One (1) - 1,107,535 gallon (nominal) external floating roof storage tank identified as Tank 110.
  - 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. Three (3) - 1,998,448 gallon (nominal) external floating roof storage tanks identified as Tanks 501, 502, and 503;
  - vi. One (1) - 5,296,298 gallon (nominal) internal floating roof storage tank identified as Tank 510; and
  - vii. Two (2) - 3,095,209 gallon (nominal) internal floating roof storage tanks identified as Tanks 610 and 611.
- d. Forty-Two (42) 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. One (1) - 1,998,448 gallon (nominal) external floating roof storage tank identified as Tank 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) vertical fixed 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;
- xxiii. One (1) - 4,605,476 gallon (nominal) vertical fixed roof storage tank identified as Tank 605; and
- xxiv. One (1) - 474,024 gallon (nominal) vertical fixed roof storage tank identified as Tank 517.

e. One (1) Denatured Ethanol Tank

One (1) - 2,520,000 gallon (nominal) internal floating roof storage tank identified as Tank 518.

(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, and 408 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)<sup>1</sup>

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)<sup>1</sup>

3. Petroleum storage tanks 107, 109, 110, 111, 518, 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)<sup>1</sup>

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, 503, 509, 510, 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, 504, 505, 506, 507, 508, 511, 512, 513, 514, 515, 516, 517, 518, 601, 602, 603, 604, 605, 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)<sup>1</sup>

**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. Tank 605 shall only store petroleum liquids with a

liquid HAP content of 0.5% by weight or less. Jet or kerosene shall not be stored in Tank 605.

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

5. The petroleum storage tank identified in Special Condition No. A.1.e of this Attachment shall only store denatured ethanol 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)

6. Petroleum Storage Tanks 106, 406, 510, 407, and 408

- 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)<sup>1</sup>

7. 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 cm<sup>2</sup> per meter of tank diameter (10.0 in<sup>2</sup> 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 cm<sup>2</sup> per meter of tank diameter (1.0 in<sup>2</sup> 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 sixty-one (61) cm (24 in) above the stored liquid surface; and
  - (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.7.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 cm<sup>2</sup> per meter of tank diameter (1.0 in<sup>2</sup> 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; and
  - (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.7.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 ninety (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)<sup>1</sup>

8. Petroleum Storage Tanks 107, 109, 110, 111, 518, 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, 518, 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 (2) 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 ninety (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 ninety (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)<sup>1</sup>

9. 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 (6) 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 (18) 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 true, accurate, and 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)<sup>1</sup>

2. Petroleum Storage Tanks 106, 406, 510, 407, and 408
  - 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, and 408, 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)<sup>1</sup>

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.7.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 (1) 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)<sup>1</sup>

4. Petroleum Storage Tanks 107, 109, 110, 111, 518, 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, 518, 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 thirty-day (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 ten (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 (1) 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 cm<sup>2</sup> 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 sixty-one (61) cm above the stored liquid surface; and
      - (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 cm<sup>2</sup> per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm; and
  - (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)<sup>1</sup>

- 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, 517, 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 four (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)<sup>1</sup>

### **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 Condition Nos. 14, 16, 17, and 24, respectively. These notifications shall include, but not be limited to:

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

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

#### 3. The permittee shall report 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 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;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department of Health including information to determine compliance.

The Compliance certification shall be submitted within **sixty (60) days after** the end of each calendar year and shall be signed and dated by a responsible official.

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, 518, 610, 611, 3520, 3522, and 3526

- a. Petroleum Storage Tanks 109, 111, 518, 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.8.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; and
- (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)<sup>1</sup>

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**

Any document (including reports) required to be submitted by this Covered Source Permit shall be in accordance with Attachment I, Standard Condition No. 28.

(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, 610, and 611) shall meet the requirements described in Special Condition Nos. C.8.b.i and C.8.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, 503, 509, 902, 3520, 3522, and 3526) shall meet the requirements described in Special Condition Nos. C.8.c.i and C.8.c.iii of this Attachment.

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

2. Monitoring and Recordkeeping Requirements

- a. For the Group 1 storage tanks with internal floating roofs (petroleum storage tanks 109, 111, 407, 408, 510, 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 two (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 ten (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, 503, 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 a 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; and
    - (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 sixty-one (61) centimeters (24 inches) above the stored liquid surface; and
    - (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; and
    - (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 (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 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, 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, 503, 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)<sup>1</sup>

### 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, 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; and
  - (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 ten (10) percent open area; and
  - (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, 503, 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)<sup>1</sup>

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

<sup>2</sup>The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.