ADMINISTRATIVE RECORD

IES Downstream, LLC
Kapolei Terminal

Application No. 0863-06 for Renewal

Located At: 91-480 Malakole Street, Kapolei, Island of Oahu

CSP No. 0863-01-C

TABLE OF CONTENTS

Public Notice

REQUEST FOR PUBLIC COMMENTS
ON DRAFT AIR PERMIT
REGULATING THE EMISSIONS OF AIR POLLUTANTS

(Docket No. 24-CA-PA-03)

Pursuant to Hawaii Revised Statutes (HRS), Chapter 342B-13 and Hawaii Administrative Rules (HAR), Chapter 11-60.1, the Department of Health, State of Hawaii (DOH), is requesting public comments on a **DRAFT PERMIT** presently under review for:

Covered Source Permit (CSP) No. 0863-01-C
Application No. 0863-06 for Renewal
IES Downstream, LLC
Kapolei Terminal
Located At: 91-480 Malakole Street, Kapolei, Island of Oahu

The **DRAFT PERMIT** is described as follows:

The renewal for CSP No. 0863-01-C would grant conditional approval for the continued operation of an existing petroleum terminal. The proposed changes to the permit include the following:

1. Removal of 40 Code of Federal Regulations (CFR) Part 63, Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries; 40 CFR Part 61, Subpart FF, National Emission Standard for Benzene Waste Operations; 40 CFR Part 60, Subpart GGG, Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006; and 40 CFR Part 68, Chemical Accident Prevention Provisions; as applicable requirements for the terminal.
2. Convert some tanks from gasoline and finished products storage to jet fuel storage.
3. Revision of permit conditions for the truck loading rack to simplify and remove limits related to products no longer subject to regulations with the facility's change to a terminal source (diesel, jet fuel) and products that are no longer loaded at the rack (aviation gasoline).
4. Revision of the truck loading rack's gasoline throughput limit from 7,300,000 barrels to 1,679,000 barrels per any rolling twelve (12) month period (193,000 gallons/day) to establish area source (minor source) status for hazardous air pollutants.
5. Changes to the insignificant activity list for the terminal, including the addition of jet kerosene tanks and a boiler.
6. Removal of Greenhouse gas (GHG) requirements required by Hawaii Administrative Rules Subchapter 11 – Greenhouse Gas Emissions.

The petroleum storage tanks storing gasoline and the petroleum truck load rack when loading gasoline are both subject to 40 CFR Part 63, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plant, and Pipeline Facilities. This permit, if issued, will supersede CSP No. 0863-01-C issued on November 16, 2018, and amended on August 6, 2020, and September 1, 2021, in its entirety.

The **ADMINISTRATIVE RECORD**, consisting of the **APPLICATION** and non-confidential supporting materials from the applicant, the permit review summary, and the **DRAFT PERMIT**, is available online at: http://health.hawaii.gov/cab/public-notices/ and for public inspection during regular office hours, Monday through Friday, 7:45 a.m. to 4:15 p.m., at the following location:

State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, Hawaii 96782

All comments on the draft permit and any request for a public hearing must be in writing, addressed to the Clean Air Branch at the above address on Oahu and must be postmarked or received by **March 16, 2024**.

Any person may request a public hearing by submitting a written request that explains the party's interest and the reasons why a hearing is warranted. The DOH may hold a public hearing if a hearing would aid in DOH's decision. If a public hearing is warranted, a public notice for the hearing will be published at least thirty days in advance of the hearing.

Interested persons may obtain copies of the administrative record or parts thereof by paying **five (5) cents per page copying costs**. Please send written requests to the CIean Air Branch listed above or call Mr. Darin Lum at the Clean Air Branch at (808) 586-4200.

Comments on the draft permit should address, but need not be limited to, the permit conditions and the facility's compliance with federal and state air pollution laws, including: (1) the National and State Ambient Air Quality Standards; and (2) HRS, Chapter 342B and HAR, Chapter 11-60.1.

DOH will make a final decision on the permit after considering all comments and will send notice of the final decision to each person who has submitted comments or requested such notice.

Kenneth S. Fink, MD, MGA, MPH
Director of Health

Draft Permit

DRAFT

DATE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(xxxx xxxx xxxx xxxx xxxx)

24-xxxE CAB
File No. 0863

Mr. Mark Dangler
Vice President - Logistics
IES Downstream, LLC
91-480 Malakole Street
Kapolei, Hawaii 96707-1883

Dear Mr. Dangler:

SUBJECT: Covered Source Permit (CSP) No. 0863-01-C
Application No. 0863-06 for Renewal
IES Downstream, LLC
Kapolei Terminal
Located At: 91-480 Malakole Street, Kapolei, Island of Oahu
Date of Expiration: DATE

The subject CSP is issued in accordance with Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information submitted as part of your renewal application dated November 14, 2022, and additional information dated February 1, 2022, and November 7, 2022. This permit shall supersede CSP No. 0863-01-C issued on November 16, 2018, and amended on August 6, 2020, and September 1, 2021, in its entirety.

The CSP is issued subject to the conditions/requirements set forth in the following attachments:

Attachment I: Standard Conditions
Attachment IIA: Special Conditions – Petroleum Storage Tanks
Attachment IIB: Special Conditions – Petroleum Truck Loading Rack
Attachment IIC: Special Conditions – Equipment in Gasoline Service
Attachment II – INSIG: Special Conditions – Insignificant Activities
Attachment III: Annual Fee Requirements
Attachment IV: Annual Emissions Reporting Requirements

The following forms are enclosed for your use and submittal as required:

Compliance Certification Form
Annual Emissions Report Form: External/Internal Floating Roof Petroleum Storage Tanks
Annual Emissions Report Form: Fixed Roof Petroleum Storage Tanks
Annual Emissions Report Form: Petroleum Truck Loading Rack
Monitoring Report Form: External/Internal Floating Roof Petroleum Storage Tanks
Monitoring Report Form: Petroleum Truck Loading Rack
Monitoring Report Form: Equipment Leaks
Monitoring Report Form: Malfunctions
Excess Emissions Report Form: Equipment Leaks

This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment; and (c) in no manner implies or suggests that the Department of Health, Clean Air Branch (herein after referred to as Department), or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

If you have any questions regarding this matter, please contact Mr. Darin Lum of the Clean Air Branch at (808) 586-4200.

Sincerely,

JOANNA L. SETO, P.E., CHIEF
Environmental Management Division

DL:tkg

Enclosures

ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

This permit is granted in accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.

   (Auth.: HAR §11-60.1-90)

2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be willfully defaced, altered, forged, counterfeited, or falsified.

   (Auth.: HAR §11-60.1-6; SIP §11-60-11)[2]

3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department, except as provided in HAR, Section 11-60.1-91.

   (Auth.: HAR §11-60.1-7; SIP §11-60-9)[2]

4. A request for transfer from person to person shall be made on forms furnished by the Department.

   (Auth.: HAR §11-60.1-7)

5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department and the U.S. Environmental Protection Agency (EPA), Region 9.

   (Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)

6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for CSP. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department, and the permit is amended to allow such deviation.

   (Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

   (Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1, and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

   (Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

   (Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

    (Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections, 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

    (Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

    (Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

    (Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department and U.S. EPA, Region 9, in writing of the following dates:

    a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;
    b. The **actual date of construction commencement** within fifteen (15) days after such date; and
    c. The **actual date of start-up** within fifteen (15) days after such date.

    (Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health (Director) may require the permittee to furnish such records not only to the Department but also directly to the U.S. EPA, Region 9, along with a claim of confidentiality.

    (Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

    a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
    b. The expected length of time that the air pollution control equipment will be out of service;
    c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
    d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
    e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

    (Auth.: HAR §11-60.1-15; SIP §11-60-16)[2]

17. **In the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit**, the permittee shall immediately notify the Department of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

a. Identification of each affected emission point and each emission limit exceeded;
b. Magnitude of each excess emission;
c. Time and duration of each excess emission;
d. Identity of the process or control equipment causing the excess emission;
e. Cause and nature of each excess emission;
f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and State Ambient Air Quality Standards;
g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)[2]

18. The permittee may request confidential treatment of any records in accordance with HAR, Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

19. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

a. Within eighteen (18) months after the permit takes effect, is discontinued for a period of eighteen (18) months or more, or is not completed within a reasonable time.
b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions, of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

20. The Department may extend the time periods specified in Standard Condition No. 19 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

22. All certifications shall be in accordance with HAR, Section 11-60.1-4.

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

23. The permittee shall allow the Director, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

    a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
    b. To sample or monitor at reasonable times substances or parameters to ensure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

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

24. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of a covered source covered by this permit**, the discontinuance shall be reported in writing to the Department by a responsible official of the source.

    (Auth.: HAR §11-60.1-8; SIP §11-60-10)[2]

25. Each permit renewal application shall be submitted to the Department and the U.S. EPA, Region 9, no less than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Director may allow a permit renewal application to be submitted no less than six (6) months prior to the permit expiration date, if the Director determines that there is reasonable justification.

    (Auth.: HAR §11-60.1-101, 40 CFR §70.5(a)(1)(iii))[1]

26. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

    (Auth.: HAR §11-60.1-93)

27. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR, Section 11-60.1-86, the compliance certification shall be submitted to the Department and the U.S. EPA, Region 9, once per year, or more frequently as set by any applicable requirement.

    (Auth.: HAR §11-60.1-90)

28. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, HI 96782

Upon request and as required by this permit, all correspondence to the State of Hawaii Department of Health associated with this CSP shall have duplicate copies forwarded to:

Manager
Enforcement Division, Air Section
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street, ENF-2-1
San Francisco, CA 94105

(Auth.: HAR §11-60.1-4, §11-60.1-90)

29. To determine compliance with submittal deadlines for time-sensitive documents, the postmark date of the document shall be used. If the document was hand-delivered, the date received ("stamped") at the Clean Air Branch shall be used to determine the submittal date.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

---

[1]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.
[2]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.

ATTACHMENT IIA: SPECIAL CONDITIONS
PETROLEUM STORAGE TANKS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In addition to the standard conditions of the CSP, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. This portion of the CSP encompasses the following equipment and associated appurtenances:

    a. Eighteen (18) Gasoline Intermediates and Finished Products Storage Tanks

        i. One (1) - 304,640 bbl external floating roof storage tank identified as Tank 111;
        ii. One (1) - 19,200 bbl external floating roof storage tank identified as Tank 232;
        iii. Two (2) - 19,000 bbl external floating roof storage tanks identified as Tanks 233 and 273;
        iv. Four (4) - 38,000 bbl external floating roof storage tanks identified as Tanks 236, 237, 255, and 256;
        v. One (1) - 37,000 bbl external floating roof storage tank identified as Tank 252;
        vi. One (1) - 37,400 bbl external floating roof storage tank identified as Tank 253;
        vii. One (1) - 33,000 bbl external floating roof storage tank identified as Tank 254;
        viii. Three (3) - 29,000 bbl external floating roof storage tanks identified as Tanks 257, 258, and 262;
        ix. One (1) - 41,000 bbl external floating roof storage tanks identified as Tank 266;
        x. One (1) - 23,000 bbl external floating roof storage tank identified as Tank 269;
        xi. One (1) - 36,000 bbl external floating roof storage tank identified as Tank 271; and
        xii. One (1) - 5,000 bbl external floating roof storage tank converted to an internal floating roof storage tank identified as Tank 275.

    b. Five (5) Crude Oil Storage Tanks

        i. One (1) - 265,440 bbl external floating roof storage tank identified as Tank 105;
        ii. Two (2) - 263,200 bbl external floating roof storage tanks identified as Tanks 106 and 109;
        iii. One (1) - 235,000 bbl external floating roof storage tank identified as Tank 108; and
        iv. One (1) - 304,640 bbl external floating roof storage tank identified as Tank 110.

    c. Three (3) Jet Fuel Storage Tanks

        i. Three (3) - 99,000 bbl vertical fixed roof storage tanks identified as Tanks 155, 156, and 158

    d. One (1) Crude Water Draw Storage Tank

        i. One (1) - 23,000 bbl external floating roof storage tank, Tank 113.

    (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. number and manufacturer of each tank.

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

Section B. Applicable Federal Regulations

1. The gasoline intermediates and finished product storage tanks are subject to the provisions of the following federal regulations when storing gasoline (any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines):

   a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and
   b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11081)[1]

2. The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, testing, monitoring and reporting 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)

Section C. Operational and Emissions Limitations

1. The true vapor pressure of the volatile organic liquid (VOL) stored in each of the storage tanks identified in Attachment IIA, Special Condition No. A.1.a shall be maintained below 11.1 pounds per square inch absolute (psia) at all times and shall be equipped with an external floating roof, except that the requirements of Attachment IIA, Special Condition No. C.1.b shall only be required if such storage tank does not currently meet the requirements of Attachment IIA, Special Condition No. C.1.a. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a tank with no fixed roof. Each external floating roof must meet the following specifications:

   a. Each external floating roof shall be equipped with a closure device between the wall of the storage tank and the roof edge. The closure device is to consist of two (2) seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to the secondary seal.

i. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in Attachment IIA, Special Condition No. D.3.d, the seal shall be completely cover the annular space between the edge of the floating roof and tank wall.
ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage tank in a continuous fashion except as allowed in Attachment IIA, Special Condition No. D.3.d.

b. 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 legs 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.
c. The roof shall 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 filing, 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, §11-60.1-174; 40 CFR §63.11087, Table 1 of Subpart BBBBBB, Option 2(c))[1]

2. The true vapor pressure of the volatile organic liquid (VOL) stored inside Storage Tank 275 shall be maintained below 11.1 psia at all times and shall be equipped with an internal floating roof according to the requirements of 40 CFR §60.112b(a)(1), except for the secondary seal requirements under 40 CFR §60.112b(a)(1)(ii)(B) and the requirements in 40 CFR §60.112b(a)(1)(iv) through (ix).

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, Table 1 of Subpart BBBBBB, Option 2(b))[1]

3. The true vapor pressure of the VOL stored in Storage Tanks 155, 156, and 158 shall not be greater than or equal to 1.5 psia.

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

4. Storage tanks identified in Attachment IIA, Special Condition No. A.1.b shall only store crude oil or lower volatility products.

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

5. Storage tanks identified in Attachment IIA, Special Condition No. A.1.c shall only store jet fuel or lower volatility products.

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

6. Each storage tank identified in Attachment IIA, Section A, except for Storage Tanks 155, 156, and 158, 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 seals to close the space between the roof edge and tank wall.

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

7. All tank gauging and sampling devices for each of the storage tanks identified in Attachment IIA, Section A, except for Storage Tanks 155, 156, and 158, shall be gas-tight except when tank gauging or sampling is taking place.

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

8. Each storage tank identified in Attachment IIA, Section A shall be equipped with a permanent submerged fill pipe.

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

Section D. Monitoring and Recordkeeping Requirements

1. Records

   All records, including support information, shall be maintained for at least five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and maintained, in a permanent form suitable for inspection and made available to the Department or its representative(s) upon request.

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

2. The permittee shall maintain and operate a tank gauging system for each petroleum storage tank to monitor the throughput of petroleum product for the purpose of calculating annual emissions.

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

3. Inspections (storage tanks identified in Attachment IIA, Special Condition No. A.1.a except for Storage Tank 275)

   External floating roof storage tank inspections of the floating roof systems shall be performed according to the requirements of 40 CFR §60.113b(b) consisting of the following:

   a. Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage tank and between the secondary seal and the wall of the storage tank according to the following frequency.

      i. 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.
      ii. 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.
      iii. If any source 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 Attachment IIA, Special Condition Nos. D.3.a.i and D.3.a.ii.

   b. Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

      i. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
      ii. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage tank and measure the circumferential distance of each such location.
      iii. The total surface area of each gap described in Attachment IIA, Special Condition No. D.3.b.ii 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.

   c. Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the normal diameter of the tank and compare each ratio to the respective standards in Attachment IIA, Special Condition No. D.3.d.
   d. 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 in Attachment IIA, Special Condition Nos. D.3.d.i and D.3.d.ii:

      i. The accumulated area of gaps between the tank wall and the mechanical shoe seal or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(1) 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.
(2) The 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 Attachment IIA, Special Condition No. D.3.b.iii.
(2) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.
(3) There are to be no holes, tears, or other openings in the seal or seal fabric.

iii. If a failure that is detected during inspections required in Attachment IIA, Special Condition No. D.3.a cannot be repaired with **forty-five (45) days** and if the tank cannot be emptied within **forty-five (45) days**, a **thirty (30) day** extension may be requested from the Department in the inspection report required in Attachment IIA, Special Condition No. E.9.b. Such 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 tank will be emptied as soon as possible.

e. Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the 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 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, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11092(e))[1]

4. Inspections (Storage Tank 275)

Internal floating roof storage tank inspections of the floating roof system shall be performed according to the requirements of 40 CFR §60.113b(a).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11092(e))[1]

5. Records

a. The permittee shall keep records for each of the storage tanks identified in Attachment IIA, Special Condition No. A.1.a except for Storage Tank 275 in accordance with 40 CFR §60.115b(b). The permittee shall keep a record of each gap measurement performed as required by Attachment IIA, Special Condition No. D.3. Each record shall identify the storage tank in which the measurement was performed and shall contain:

i. The date of measurement.
ii. The raw data obtained in the measurement.
iii. The calculations described in Attachment IIA, Special Condition Nos. D.3.b and D.3.c.

b. The permittee shall keep records for Storage Tank 275 in accordance with 40 CFR §60.115b(a). The permittee shall keep a record of each inspection performed as required by 40 CFR §60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage tank on which the inspection was performed and shall contain the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

c. For each storage tank identified in Attachment IIA, Section A, the following records shall also be maintained at the facility:

i. Records showing the dimensions (feet) of the storage tanks and the analysis showing the capacity (gallons or barrels) of the storage tanks shall be maintained for the life of the tank;
ii. Type of seal(s);
iii. Type of VOL stored, the period of storage, and the maximum true vapor pressure (psia) of the VOL stored during the respective storage period. Determination of the maximum true vapor pressure shall be done in accordance with 40 CFR §60.116b(e). The method used to determine the maximum true vapor pressure shall be identified in the records; and
iv. Each inspection and corrective action performed; including records of the storage tank identification no., the date the tank was inspected, the observed condition of each component of the control equipment (seals, roof, fittings, etc.), and any repairs made.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11094)[1]

6. Malfunctions (storage tanks identified in Attachment IIA, Special Condition No. A.1.a)

   The permittee shall keep the following records for malfunctions:

   a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
   b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11094)[1]

Section E. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 17 and 24, respectively:

   a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit; and
   b. 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)

2. Deviations

   The permittee shall report **within five (5) working days** any deviations from permit requirements, including those attributed to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for testing, or 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)

3. Annual Emissions

   a. As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **annually** the total tons per year emitted of each regulated air pollutant including hazardous air pollutants (HAPs). The reporting of annual emissions is due **within sixty (60) days** following the end of each calendar year. Completion and submittal of the **Annual Emissions Form: External/Internal Floating Roof Petroleum Storage Tanks**, and **Fixed Roof Petroleum Storage Tanks** or equivalent forms, shall be used for reporting.

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

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

4. Compliance Certification

a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 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:

i. The identification of each term or condition of the permit that is the basis of the certification;
ii. The compliance status;
iii. Whether compliance was continuous or intermittent;
iv. The methods used for determining the compliance status of the source currently and over the reporting period;
v. 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;
vi. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and which the excursion or exceedances as defined in 40 CFR Part 64 occurred; and
vii. Any additional information as required by the Department, including information to determine compliance.

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

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

5. Notifications (storage tanks identified in Attachment IIA, Special Condition No. A.1.a)

a. The permittee shall submit to the Department and U.S. EPA, Region 9, a Notification of Compliance Status as specified in 40 CFR §63.9(h). The Notification of Compliance Status must specify which compliance options included in Table 1 of 40 CFR Part 63, Subpart BBBBBB, is used to comply with Subpart BBBBBB. The Notification of Compliance Status shall be submitted in accordance with Attachment IIA, Special Condition No. E.4.

b. The permittee shall submit to the Department and U.S. EPA, Region 9, additional notifications specified in 40 CFR §63.9, as applicable.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11093)[1]

6. Notifications of Inspections (storage tanks identified in Attachment IIA, Special Condition No. A.1.a except for Storage Tank 275)

a. The permittee shall notify the Department **thirty (30) days** in advance of any gap measurements required by Attachment IIA, Special Condition No. D.3.a to afford the Department the opportunity to have an observer present.
b. For all inspections required by Attachment IIA, Special Condition No. D.3.e, the permittee shall notify the Department in writing at least **thirty (30) days** prior to the filling or refilling of each storage tank to afford the Department the opportunity to inspect the storage tank prior to refilling. If the inspection required by Attachment IIA, Special Condition No. D.3.e 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 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 by writing and sent by express mail so that it is received by the Department at least **seven (7) days** prior to the refilling.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11092(e))[1]

7. Notifications of Inspections (Storage Tank 275)

The permittee shall notify the Department in writing at least **thirty (30) days** prior to the filling or refilling of each storage tank for which an inspection is required by 40 CFR §60.113b(a)(1) and (a)(4) to afford the Department the opportunity to have an observer present. If the inspection required by 40 CFR §60.113b(a)(4) is not planned and the permittee could not have known about the inspection **thirty (30) days** in advance or refilling the tank, the permittee shall notify the Department 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 is received by the Department at least **seven (7) days** prior to the refilling.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11092(e))[1]

8. Monitoring Reports

   The permittee shall submit **semi-annually** the following written reports to the Department and U.S. EPA, Region 9. The reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31).

   a. A compliance report for each of the gasoline intermediates and finished product storage tanks identified in Attachment IIA, Special Condition No. A.1.a. The enclosed **Monitoring Report Form: External/Internal Floating Roof Petroleum Storage Tanks** or an equivalent form shall be used for reporting.
   b. The number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR §63.11085(a), including actions taken to correct a malfunction. The enclosed **Monitoring Report Form: Malfunctions** shall be used for reporting.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11095)[1]

9. Reports (storage tanks identified in Attachment IIA, Special Condition No. A.1.a except for Storage Tank 275)

   a. Within **sixty (60) days** of performing the seal gap measurements required by Attachment IIA, Special Condition No. D.3.a, the permittee shall furnish the Department and U.S. EPA Region 9 with a report that contains:

      i. The date of measurement;
      ii. The raw data obtained in the measurement; and
      iii. The calculations described in Attachment IIA, Special Condition Nos. D.3.b and D.3.c.

   b. After each seal gap measurement that detects gaps exceeding the limitations specified by Attachment IIA, Special Condition No. D.3.d, the permittee shall submit a report to the Department of Health and U.S. EPA Region 9 within **thirty (30) days** of the inspection. The report will identify the tank and contain the information specified in Attachment IIA, Special Condition No. E.9.a and the date the tank was emptied or the repairs made and date of repair.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11095)[1]

10. Reports (Storage Tank 275)

    a. If any conditions described in 40 CFR §60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR §60.113b(a)(2), a report shall be furnished by the permittee to the Department and U.S. EPA Region 9 within **thirty (30) days** of the inspection. Each report shall identify the storage tank, the nature of defects, and the date the storage tank was emptied or the nature of and date the repair was made.
    b. After each inspection required by 40 CFR §60.113b(a)(3) 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 40 CFR §60.113b(a)(3)(ii), a report shall be furnished by the permittee to the Department and U.S. EPA Region 9 within **thirty (30) days** of the inspection. The report shall identify the storage tank and the reason it did not meet the specifications of 40 CFR §60.112b(a)(1) or 40 CFR §60.113b(a)(3) and list each repair made.

    (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11087, §63.11095)[1]

Section F. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

[1]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.
[2]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.

ATTACHMENT IIB: SPECIAL CONDITIONS
PETROLEUM TRUCK LOADING RACK
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In addition to the standard conditions of the CSP, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

1. This portion of the CSP encompasses the following equipment and associated appurtenances:

   Petroleum Truck Loading Rack

   (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 number 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 petroleum truck loading rack is subject to the provisions of the following federal regulations when loading gasoline (any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines):

   a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and
   b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11081)[1]

2. The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, testing, monitoring and reporting 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)

Section C. Operational and Emission Limitations

1. The maximum throughput of motor gasoline (for the purpose of this limit, "motor gasoline" includes motor gasoline, naphtha, and blended ethanol) at the petroleum truck loading rack shall not exceed 1,679,000 barrels per any rolling twelve (12) month period.

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

2. The permittee shall use submerged filling with a submerged fill pipe that is no more than 6 inches from the bottom of the cargo tank.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174, 40 CFR §63.11088)[1]

Section D. Monitoring and Recordkeeping Requirements

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

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP §11-60-15)[2]

2. The permittee shall operate and maintain a non-resetting flow meter to monitor the throughput of motor gasoline, diesel, and jet fuel from the petroleum truck loading rack. Records of throughputs for each product shall be maintained on a **daily, monthly and rolling twelve (12) month basis.**

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP §11-60-15)[2]

3. The permittee shall make records available **within twenty-four (24) hours** of a request by the Department or the U.S. EPA, Region 9 to document the load rack's average daily gasoline throughput.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11088;
   40 CFR Part 63, Subpart BBBBBB, Table 2)[1]

4. Malfunctions

   The permittee shall keep the following records for malfunctions:

   a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment; and

b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11094)[1]

Section E. Notification and Reporting Requirements

1. The permittee shall submit **semi-annually** the following written reports to the Department. 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. Throughputs of motor gasoline, diesel and jet fuel on a monthly and rolling twelve (12) month basis. The enclosed **Monitoring Report Form: Petroleum Truck Loading Rack** or an equivalent form shall be used in reporting.
   b. Deviations from permit requirements shall be clearly identified and addressed in these reports.

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

2. Annual Emissions

   As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **annually** 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: Petroleum Truck Loading Rack** or an equivalent form, shall be used in reporting emissions.

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

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

3. 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; 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)

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

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

5. Compliance Certification

   a. During the permit term, the permittee shall submit at least **annually** to the Department 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:

      i. The identification of each term or condition of the permit that is the basis of the certification;
      ii. The compliance status;
      iii. Whether compliance was continuous or intermittent;
      iv. The methods used for determining the compliance status of the source currently and over the reporting period;
      v. 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;
      vi. 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 exceedance as defined in 40 CFR Part 64 occurred; and
      vii. Any additional information as required by the Department including information to determine compliance.

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

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

6. Notifications

   a. The permittee shall submit to the Department and U.S. EPA, Region 9, a Notification of Compliance Status as specified in 40 CFR §63.9(h). The Notification of Compliance Status shall be submitted in accordance with Attachment IIB, Special Condition No. E.5.

b. The permittee shall submit to the Department and U.S. EPA, Region 9, additional notifications specified in 40 CFR §63.9, as applicable.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.11093)[1]

Section F. Agency Notifications

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

[1]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.

[2]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.

ATTACHMENT IIC: SPECIAL CONDITIONS
EQUIPMENT IN GASOLINE SERVICE
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In addition to the standard conditions of the CSP, the following special conditions shall apply to the permitted facility.

Section A. Equipment Description

Attachment IIC of this permit encompasses each piece of equipment used in a system that transfers gasoline or gasoline vapors. Equipment under Attachment IIC is each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, flange or other connector in the gasoline liquid transfer, and vapor collection systems. Equipment under Attachment IIC also includes the entire vapor processing system except for exhaust port(s) or stack(s).

(Auth.: HAR §11-60.1-3)

Section B. Applicable Federal Regulations

1. Each piece of equipment in gasoline service is subject to the provisions of Attachment IIC and the following federal regulations:

    a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and
    b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

    (Auth.: HAR §11-60.1-3, §11-60.1-90, §11.60.1-174, 40 CFR §63.11081)[1]

2. 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)

Section C. Operational and Emissions Limitations

1. Leak Inspection

    a. The permittee shall perform monthly leak inspection of all equipment in gasoline service. For the monthly leak inspection, detection methods incorporating sight, sound, and smell are acceptable.

b. A logbook shall be used and shall be signed by the permittee at the completion of each inspection. A section of the logbook shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.
c. Each detection of a liquid or vapor leak shall be recorded in the logbook.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11089)[1]

2. Leak Repair

a. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar days after detection of each leak, except as provided in Attachment IIC, Special Condition No. C.2.b.
b. Delay of repair of leaking equipment will be allowed if the repair is not feasible within fifteen (15) days.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.11089)[1]

Section D. Monitoring and Recordkeeping Requirements

1. Records

All records, including support information, shall be maintained for at least five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department or its representative(s) upon request.

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

2. Recordkeeping

a. The permittee shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. If an instrument program is implemented for leak inspections, the record shall contain a full description of the program.
b. The permittee shall record in a logbook for each leak that is detected the following information:

i. The equipment type and identification number;
ii. The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell);
iii. The date the leak was detected and the date of each attempt to repair the leak;

iv. Repair methods applied in each attempt to repair the leak;
v. "Repair delayed" and the reason for the delay if the leak is not repaired within fifteen (15) calendar days after discovery of the leak;
vi. The expected date of successful repair of the leak if the leak is not repaired within fifteen (15) days; and
vii. The date of successful repair of the leak.

(Auth: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.11094)[1]

Section E. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 17 and 24, respectively:

a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1, or this permit; and
b. 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; SIP §11-60-10, §11-60-16)[2]

2. Deviations

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

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

3. Compliance Certification

a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 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:

i. The identification of each term or condition of the permit that is the basis of the certification;
ii. The compliance status;
iii. Whether compliance was continuous or intermittent;

iv. The methods used for determining the compliance status of the source currently and over the reporting period;
v. 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;
vi. Brief description of any deviations including identifying as possible exceptions to compliance and periods during which compliance is required and which the excursion or exceedances as defined in 40 CFR Part 64 occurred; and
vii. Any additional information as required by the Department, including information to determine compliance.

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

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

4. Notifications

a. The permittee shall submit to the Department and U.S. EPA, Region 9, a Notification of Compliance Status as specified in 40 CFR §63.9(h). Notification of compliance status shall be submitted in accordance with Attachment IIC, Special Condition No. E.3.
b. The permittee shall submit to the Department and U.S. EPA, Region 9, additional notifications specified in 40 CFR §63.9, as applicable.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.9, §63.11093)[1]

5. Monitoring Reports

The permittee shall submit **semi-annually** the following written reports to the Department and U.S. EPA, Region 9. The reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31).

a. For equipment leak inspections, the number of equipment leaks not repaired within fifteen (15) days after detection. The enclosed **Monitoring Report Form: Equipment Leaks** shall be used for reporting.

b. An excess emissions report containing the following information:

For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15) days after detection:

i. The date on which the leak was detected;
ii. The date of each attempt to repair the leak;
iii. The reasons for the delay of repair; and
iv. The date of successful repair.

The enclosed **Excess Emissions Report Form: Equipment Leaks** shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.11089, §63.11095)[1]

Section F. Agency Notifications

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

[1]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.
[2]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

ATTACHMENT II – INSIG: SPECIAL CONDITIONS
INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In addition to the Standard Conditions of the CSP, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This attachment encompasses insignificant activities listed in HAR §11-60.1-82(f) and (g) for which provisions of this permit and HAR, Subchapter 2, General Prohibitions, apply. Specifically, the following equipment are insignificant activities:

    a. Five (5) Jet Fuel Storage Tanks

        i. One (1) - 135,000 bbl internal floating roof storage tank identified as Tank 114;
        ii. Four (4) – 275,000 bbl internal floating roof storage tank identified as Tanks 115, 141, 142, and 143.

    b. Three (3) Recovered Oil and Transmix Storage Tanks

        i. Two (2) - 4,700 bbl external floating roof storage tanks identified as Tanks 162 and 163; and
        ii. One (1) - 19,200 bbl external floating roof storage tank identified as Tank 235.

    c. One (1) – 30,000 bbl external floating roof storage tank, Tank 116, for storing water for hydrotesting or storing oily water.
    d. One (1) 150 hp ultra-low sulfur diesel fired boiler (5.02 MMBtu/hr) used for the Black Oil Tank cleaning project.

    (Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

1. The permittee shall take measures to operate applicable insignificant activities in accordance with the provisions of HAR, Subchapter 2 for visible emissions, fugitive dust, incineration, process industries, sulfur oxides from fuel combustion, storage of volatile organic compounds, volatile organic compound water separation, pump and compressor requirements, and waste gas disposal.

    (Auth.: HAR §11-60.1-3, §11-60.1-82, §11-60.1-90)

2. The Department may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

    (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-82, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. The Department reserves the right to require monitoring, recordkeeping, or testing of any insignificant activity to determine compliance with the applicable requirements.

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

2. All records shall be maintained for at least **five (5) years** from the date of any required monitoring, recordkeeping, testing, or reporting. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department or its authorized representative upon request.

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

Section D. Notification and Reporting

Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department 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:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source currently and over the reporting period;
5. 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;
6. 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 Part 64 occurred; and
7. Any additional information as required by the Department 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 determines that reasonable justification exists for the extension.

DRAFT

In lieu of addressing each emission unit as specified in **Compliance Certification Form**, the permittee may address insignificant activities as a single unit provided compliance is met with all applicable requirements. If compliance is not totally attained, the permittee shall identify the specific insignificant activity and provide the details associated with the noncompliance.

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

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

The following requirements for the submittal of annual fees are established pursuant to HAR, Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1.

1. Annual fees shall be paid in full:

   a. Within **120 days** after the end of each calendar year; and
   b. Within **thirty (30) days** after the permanent discontinuance of the covered source.

2. The annual fees shall be determined and submitted in accordance with HAR, Chapter 11-60.1, Subchapter 6.

3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and be submitted on forms furnished by the Department.

4. The annual fees and the emission data shall be mailed to:

State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, HI 96782

ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department the nature and amounts of emissions.

1. Complete the attached forms:

   Annual Emissions Report Form: External/Internal Floating Roof Petroleum Storage Tank
   Annual Emissions Report Form: Fixed Roof Petroleum Storage Tank
   Annual Emissions Report Form: Petroleum Truck Loading Rack

2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department within **sixty (60) days** after the end of each calendar year and shall be mailed to the following address:

   State of Hawaii
   Clean Air Branch
   2827 Waimano Home Road, #130
   Pearl City, HI 96782

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department upon request.

4. Any information submitted to the Department without a request for confidentiality shall be considered public record.

5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information, including information concerning secret processes or methods of manufacture, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(PAGE 1 OF ___)

Issuance Date: DATE **Expiration Date: DATE**

In accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as requested by the Department of Health.

(Make Copies of the Compliance Certification Form for Future Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE 2 OF ___)

Issuance Date: DATE **Expiration Date: DATE**

The purpose of this form is to evaluate whether or not the facility was in compliance with the permit terms and conditions during the covered period. If there were any deviations to the permit terms and conditions during the covered period, the deviation(s) shall be certified as *intermittent compliance* for the particular permit term(s) or condition(s). Deviations include failure to monitor, record, report, or collect the minimum data required by the permit to show compliance. In the absence of any deviation, the particular permit term(s) or condition(s) may be certified as *continuous compliance*.

Instructions:

Please certify Sections A, B, and C below for continuous or intermittent compliance. Sections A and B are to be certified as a group of permit conditions. Section C shall be certified individually for each operational and emissions limit condition as listed in the Special Conditions section of the permit (list all applicable equipment for each condition). Any deviations shall also be listed individually and described in Section D. The facility may substitute its own generated form in verbatim for Sections C and D.

A. Attachment I, Standard Conditions

Permit term/condition	Equipment	Compliance
All standard conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent

B. Special Conditions - Monitoring, Recordkeeping, Reporting, Testing, and INSIG

Permit term/condition	Equipment	Compliance
All monitoring conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
Permit term/condition All recordkeeping conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All reporting conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All testing conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All INSIG conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE ____ OF ___)

Issuance Date: DATE **Expiration Date: DATE**

C. Special Conditions - Operational and Emissions Limitations

Each permit term/condition shall be identified in chronological order using attachment and section numbers (e.g., Attachment II, B.1, Attachment IIA, Special Condition No. B.1.f, etc.). Each equipment shall be identified using the description stated in Section A of the Special Conditions (e.g., unit no., model no., serial no., etc.). Check all methods (as required by permit) used to determine the compliance status of the respective permit term/condition.

Permit term/condition	Equipment	Method	Compliance
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent

(Make Additional Copies if Needed)

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE ___ OF ___)

Issuance Date: DATE **Expiration Date: DATE**

D. Deviations

Permit Term/ Condition	Equipment / Brief Summary of Deviation*	Deviation Period time (am/pm) & date (mo/day/yr)	Date of Written Deviation Report to DOH (mo/day/yr)
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	

*Identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred.

(Make Additional Copies if Needed)

ANNUAL EMISSIONS REPORT FORM
EXTERNAL/INTERNAL FLOATING ROOF PETROLEUM STORAGE TANKS
COVERED SOURCE PERMIT NO. 0863-01-C
(PAGE 1 OF 2)

Issuance Date: DATE **Expiration Date: DATE**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period:_____ Date:_____

Company: _____ _____

Facility Name: _____

Equipment Location:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record.

Responsible Official (PRINT):_____

Title:_____

Responsible Official (Signature):_____

TANK	IDENTIFICATION NUMBER					
	CAPACITY (bbl)					
	DIAMETER (ft) - **D**					
	COLOR					
	TYPE OF DECK[1]					
	NUMBER OF COLUMNS (DIMENSIONLESS) - **Nc**					
	TYPE OF RIM SEAL[2]					
	TOTAL NUMBER OF DIFFERENT TYPE DECK FITTINGS[3] (DIMENSIONLESS) - $\mathbf{n}_f$					
PRODUCT	NAME					
	REID VAPOR PRESSURE (psi)					
	TRUE VAPOR PRESSURE (psia) - $\mathbf{P}_{VA}$					
	STORAGE TEMP. (^oF)					
ANNUAL THROUGHPUT (bbl/yr) - **Q**						

ANNUAL EMISSIONS REPORT FORM
EXTERNAL/INTERNAL FLOATING ROOF PETROLEUM STORAGE TANKS
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE 2 OF 2)

Issuance Date: DATE **Expiration Date: DATE**

[1]Type A: Column-supported fixed roof with bolted deck
Type B: Column-supported fixed roof with welded deck
Type C: Self-supporting fixed roof with bolted deck
Type D: Self-supporting fixed roof with welded deck

[2]Type VMP: Vapor-mounted resilient foam-filled primary seal only
Type LMP: Liquid-mounted resilient foam-filled primary seal only
Type LFP: Liquid-filled primary seal only
Type MSP: Mechanical shoe primary seal only
Type VMPS: Vapor-mounted resilient foam-filled primary seal plus secondary seal
Type LMPS: Liquid-mounted resilient foam-filled primary seal plus secondary seal
Type LFPS: Liquid-filled primary seal plus secondary seal
Type MSPSS: Mechanical shoe primary seal plus secondary seal (shoe mounted)
Type MSPSR: Mechanical shoe primary seal plus secondary seal (rim mounted)

[3]For each tank, provide a listing of each type of deck fitting and the corresponding quantity of each fitting. [See Table 7.1-12, AP-42, Section 7.1(06/2020)]

ANNUAL EMISSIONS REPORT FORM
FIXED ROOF PETROLEUM STORAGE TANKS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period:_____ Date:_____

Company:_____

Facility Name:_____

Equipment Location:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record.

Responsible Official (PRINT):_____

Title:_____

Responsible Official (Signature):_____

TANK	IDENTIFICATION NUMBER			
	CAPACITY (bbl)			
	DIAMETER (ft)			
	HEIGHT (ft)			
	PAINT CONDITION[a]			
	COLOR[b]			
	POSITION[c]			
	TYPE OF ROOF[d]			
PRODUCT	PRODUCT NAME			
	REID VAPOR PRESSURE (psi)			
	TRUE VAPOR PRESSURE (psia)			
	STORAGE TEMP. (^{o}F)			
ANNUAL THROUGHPUT (bbl/yr)				
AIR POLLUTION CONTROL DEVICE/METHOD[e]				

a. Indicate paint condition as "G" (good) or "P" (poor).
b. If the tank is totally underground, indicate a "und" in lieu of specifying a color.
c. Indicate whether the tank's position is "V" (vertical) or "H" (horizontal).
d. Indicate whether the roof construction is "F" (flat), "C" (cone) or "D" (dome).
e. Indicate applicable control device/method (i.e., vapor recovery system, vapor balance, etc.).

ANNUAL EMISSIONS REPORT FORM
PETROLEUM TRUCK LOADING RACK
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period:_____ Date:_____

Company:_____

Facility Name:_____

Equipment Location:_____

Equipment Description:_____

Equipment Capacity/Rating (specify units):_____
(Units such as Horsepower, kilowatt, tons/hour, Btu/hr, etc.)

Serial/ID No.:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT):_____

Title:_____

Responsible Official (Signature):_____

Product	Total Throughput (barrels/yr)
Motor gasoline[1]	
Diesel	
Jet Fuel	

[1]Motor gasoline includes motor gasoline, naphtha, and blended ethanol.

MONITORING REPORT FORM
EXTERNAL/INTERNAL FLOATING ROOF PETROLEUM STORAGE TANKS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health and U.S. EPA, Region 9, the following information **semi-annually**:

(Make Copies for Future Use)

For Reporting Period:_____ Date:_____

Company:_____

Facility Name:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (PRINT):_____

Title:_____

Responsible Official (Signature):_____

1. Report true vapor pressure exceedances above 11.1 psia for the reporting period:

Tank No.	True Vapor Pressure (psia)	How Determined	Type of Fuel Stored	Period of Exceedance	Storage Temperature (ºF)

2. Report a summary of tank inspection for the reporting period:

Tank No.	Inspection Date	Deficiencies/Defects Description	Date and Repair Made	Date Tank was Last Emptied

3. For the reporting period, attach the information required from 40 CFR §60.115b(b) for complying with option 2(b) or 2(c) in Table 1 of 40 CFR Part 63, Subpart BBBBBB as applicable for storage tanks identified in Attachment IIA, Special Condition No. A.1.a.

4. Identify deviations from permit requirements.

MONITORING REPORT FORM
PETROLEUM TRUCK LOADING RACK
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information **semi-annually**:

(Make Copies for Future Use)

For Period:_____ Date:_____

Company:_____

Facility Name:_____

Equipment Location:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record.

Responsible Official (PRINT):_____

Title:_____

Responsible Official (Signature):_____

Product	Motor Gasoline[1]		Diesel		Jet Fuel	
Month	Monthly Basis (barrels)	Rolling 12 Months Basis (barrels)	Monthly Basis (barrels)	Rolling 12 Months Basis (barrels)	Monthly Basis (barrels)	Rolling 12 Months Basis (barrels)
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

[1]Motor gasoline includes motor gasoline, naphtha, and blended ethanol.

MONITORING REPORT FORM
EQUIPMENT LEAKS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health and U.S. EPA, Region 9, the following information **semi-annually**:

(Make Copies for Additional Use)

For Reporting Period: _____ Date: _____

Company: _____

Facility Name: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

For equipment leak inspection and repair performed in accordance with Attachment IIC, report each leak not repaired within fifteen (15) days after detection:

Leak Detection Date	Equipment Type and Identification Number	Reasons Why Repair not Feasible	Date Repair Completed

MONITORING REPORT FORM
MALFUNCTIONS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health and U.S. EPA, Region 9, the following information **semi-annually**:

(Make Copies for Additional Use)

For Reporting Period: _____ Date: _____

Company: _____

Facility Name: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

Report each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emissions limitation to be exceeded:

Date	Description	Duration	Corrective Actions

EXCESS EMISSIONS REPORT FORM
EQUIPMENT LEAKS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: DATE **Expiration Date: DATE**

In accordance with HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health and U.S. EPA, Region 9, the following information **semi-annually**:

(Make Copies for Additional Use)

For Reporting Period: _____ Date: _____

Company: _____

Facility Name: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15) days after detection, provide the information requested below:

Date Leak Detected	Date at Each Attempt to Repair Leak	Reasons for Delay of Repair	Date of Successful Repair

Draft Review Summary

Permit Application Review Summary

Application No.:	Application No. 0863-06 for Renewal
Permit No.:	Covered Source Permit (CSP) No. 0863-01-C
Applicant:	IES Downstream, LLC
Facility Title:	Kapolei Terminal Located At: 91-480 Malakole Street, Kapolei, Oahu UTM: Zone 4; 2,356,430 m N, 591,900 m E (NAD-83)
Mailing Address:	IES Downstream, LLC 91-480 Malakole Street Kapolei, Hawaii 96707-1883
Responsible Official:	Mr. Mark Dangler Vice President – Logistics IES Downstream, LLC Phone: (808) 682-5711
Point of Contact:	Ms. Gail Godenzi Technical Manager IES Downstream, LLC Phone: (808) 682-3113
Application Dates:	November 14, 2022 Insignificant Activity letter dated February 1, 2022 Insignificant Activity letter dated November 7, 2022

Proposed Project:

SICC 5171 (Petroleum Bulk Stations and Terminals)

This application is renewal of CSP No. 0863-01-C. Due to the permit closure of CSP No. 0863-02-C, on November 9, 2022, the Kapolei Terminal is no longer subject to 40 Code of Federal Regulations (CFR) Part 63, Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries. CSP No. 0863-02-C consisted of the Fluid Catalytic Cracking Unit, Dimersol, and Alkylation Plants of the former Kapolei Petroleum Refinery (CSP No. 0088-01-C). With the closure of CSP No. 0863-02-C, CSP No. 0863-01-C can no longer be considered a part of a petroleum refinery, but is still a major source of volatile organic compounds (VOCs) and an area source of hazardous air pollutants (HAPs). It can now be classified as a petroleum bulk terminal and subject to only 40 CFR Part 63, Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities. Other requirements for petroleum refineries under 40 CFR Part 60, Subpart GGG, 40 CFR Part 61, Subpart FF, and 40 CFR Part 68 are also not applicable.

Proposed changes to the permit include the following:

1. Revisions to storage tank products to convert some tanks from gasoline and finished products storage to jet fuel storage.
2. Removal of Tank 251 from the permit, since it is out of service.
3. Revision of permit conditions for the truck loading rack to simplify and remove limits related to products no longer subject to regulations with the facility's change to a terminal source (diesel, jet fuel) and products that are no longer loaded at the rack (aviation gasoline).
4. Revision of the truck loading rack's gasoline throughput limit from 7,300,000 barrels to 1,679,000 barrels per any rolling twelve (12) month period (193,000 gallons/day) to establish area source status.
5. Changes to the insignificant activity list for the terminal, including the addition of jet kerosene tanks and a boiler.
6. Removal of Greenhouse gas (GHG) requirements required by Hawaii Administrative Rules (HAR) Subchapter 11 – Greenhouse Gas Emissions.

A renewal permit application fee of $3,000.00 was submitted by the applicant and processed.

Equipment Description:

The Kapolei Terminal permit consists of the following equipment:

1. Petroleum storage tanks consisting of the following:

    a. Eighteen (18) Gasoline Intermediates and Finished Products Storage Tanks;
    b. Five (5) Crude Oil Storage Tanks;
    c. Three (3) Jet Fuel Storage Tanks;
    d. One (1) Crude Water Draw Storage Tank;

2. Petroleum truck loading rack; and
3. Equipment in gasoline service.

Applicable Requirements:

<u>Hawaii Administrative Rules (HAR)</u>
Title 11, Chapter 59 - Ambient Air Quality Standards
Title 11, Chapter 60.1 - Air Pollution Control
    Subchapter 1 - General Requirements
    Subchapter 2 - General Prohibition
        HAR 11-60.1-31: Applicability
    Subchapter 5 - Covered Sources
    Subchapter 6 - Fees for Covered Sources, Noncovered Sources, and Agricultural Burning
        HAR 11-60.1-111: Definitions
        HAR 11-60.1-112: General Fee Provisions for Covered Sources
        HAR 11-60.1-113: Application Fees for Covered Sources
        HAR 11-60.1-114: Annual Fees for Covered Sources
        HAR 11-60.1-115: Basis of Annual Fees for Covered Sources

Subchapter 9 - Hazardous Air Pollutant Sources
HAR 11-60.1-173: Applicability
HAR 11-60.1-174: Maximum Achievable Control Technology (MACT) Emission Standards

Federal Requirements
40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT)

Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities - is applicable to this facility since it is no longer a major source of HAPs, and is applicable to all tanks in gasoline service (Eighteen (18) Gasoline Intermediates and Finished Products Storage Tanks), the petroleum tank truck load rack, and fugitive components in gasoline. Using the throughput of 1,679,000 barrels of motor gasoline per any rolling twelve (12) month period, the petroleum tank truck load rack has a total throughput of less than 250,000 gallons per day of gasoline. Per the requirements in Table 2 of Subpart BBBBBB, the facility is required to use submerged filling with a submerged fill pipe (no more than six (6) inches from the bottom of the cargo tank) and keep records of all throughputs that are available upon request.

Non-Applicable Requirements:

Hawaii Administrative Rules (HAR)
Title 11, Chapter 60.1 - Air Pollution Control
Subchapter 7 - Prevention of Significant Deterioration Review
Subchapter 8 - Standards of Performance for Stationary Sources
HAR 11-60.1-161: New Source Performance Standards
Subchapter 9 - Hazardous Air Pollutant Sources
HAR 11-60.1-174: Maximum Achievable Control Technology (MACT) Emission Standards
HAR 11-60.1-180: National Emission Standards for Hazardous Air Pollutants
Subchapter 11: Greenhouse Gas Emissions – is not applicable since it's potential to emit GHG emissions as a covered source facility is less than 100,000 tpy as carbon dioxide equivalent (CO_2e).

Federal Requirements
40 CFR Part 52, §52.21 - Prevention of Significant Deterioration of Air Quality

40 CFR Part 60 – Standards of Performance for New Stationary Sources (NSPS)

Subpart K – Standards of Performance for Storage Vessel for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 – is not applicable since all current tanks were constructed prior to 1973 with no modifications or reconstructions.

Subpart Ka - Standards of Performance for Storage Vessel for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 - is not applicable since all current tanks were constructed prior to 1973 with no modifications or reconstructions.

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 - is not applicable since all current tanks were constructed prior to 1973 with no modifications or reconstructions.

Subpart XX - Standard of Performance for Bulk Gasoline Terminals – is not applicable since the load rack was constructed prior to 1980 with no modifications or reconstructions.

Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006 – is not applicable since this facility is not part of a petroleum refinery anymore.

40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPS)

Subpart FF – National Emission Standard for Benzene Waste Operations - is not applicable since this facility is not part of a petroleum refinery anymore.

40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT)

Subpart R - National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Facilities - is not applicable to the facility because the facility is not a major source of HAPs.

Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries – is not applicable to the facility because the facility is not part of a petroleum refinery anymore.

40 CFR Part 68 – Chemical Accident Prevention Provisions - The Kapolei Terminal does not exceed the threshold quantity of a regulated substance listed in §68.130, as the following exemptions apply:

<u>Gasoline</u>
Exempt from counting toward threshold quantities per §68.115(2)(ii) because it is in distribution or related storage for use as a fuel for internal combustion engines.

<u>Crude oil</u>
Exempt from counting toward threshold quantities per §68.115(b)(2)(iii) because it is a naturally occurring hydrocarbon mixture prior to entry into a petroleum refining process unit.

<u>Jet, Diesel, Naphtha</u>
Available stock chemical speciation data used in the development of the permit renewal application shows only one substance above one (1) percent by weight in the mixture. This is benzene in naphtha. Benzene does not have a listed threshold quantity in §68.130 therefore is not subject to regulation. Available speciation data does not show any other substances above one (1) percent by weight in these stocks, therefore quantities of jet, diesel, and naphtha do not need to be counted toward threshold quantities per §68.115(b)(1).

Transmix, oily water, recovered oil
These substances are made up of the above substances with the only addition being water. Because these substances contain only other substances that are inherently exempt from regulation, these substances should not be subject to regulation themselves.

Best Available Control Technology (BACT):

A BACT analysis is required for new covered sources and significant modifications to covered sources that have the potential to emit or increase emissions above significant amounts as defined in HAR §11-60.1. A BACT analysis is not applicable for this permit renewal since there are no emission increases proposed for this existing covered source

Prevention of Significant Deterioration (PSD):

This project is not subject to PSD nor is a PSD major modification. A PSD major modification is defined as a project at an existing major stationary source that will result in a significant emissions increase and a significant net emissions increase of any pollutant subject to regulations approved pursuant to the Clean Air Act as defined in 40 CFR Part 52, §52.21. The Kapolei Terminal is a major stationary source, but is grandfathered from PSD and this is not a PSD major modification since the applicant is not proposing any emission increases.

Air Emissions Reporting Requirements (AERR):

40 CFR Part 51, Subpart A – Air Emissions Reporting Requirements, is based on the emissions of criteria air pollutants from Type A and B point sources (as defined in 40 CFR Part 51, Subpart A), that emit at the AERR triggering levels as shown in the following table:

Pollutant	Type A Triggering Levels[1,2] (tpy)	Type B Triggering Levels[1] (tpy)	Pollutant	In-house Total Facility Triggering Levels[1] (tpy)	Potential Emissions (tpy)
VOC	≥250	≥100	VOC	≥25	336.4
			HAPS	≥5	23.88

[1]Based on potential emissions.
[2]Type A sources are a subset of Type B sources and are the larger emitting sources by pollutant.

The Kapolei Terminal exceeds the Type A triggering levels. Therefore, AERR requirements are applicable.

The Clean Air Branch also requests annual emissions reporting from those facilities that have facility-wide emissions of a single air pollutant exceeding in-house triggering levels or is a covered source. Annual emissions reporting for the facility will be required for in-house recordkeeping purposes since this is a covered source.

Compliance Assurance Monitoring (CAM):

40 CFR Part 64

Applicability of the CAM rule is determined on a pollutant specific basis for each affected emission unit. Each determination is based upon a series of evaluation criteria. In order for an emission unit to be subject to CAM, each emission unit must:

- Be located at a major source per Title V of the Clean Air Act Amendments of 1990;
- Be subject to federally enforceable applicability requirements;
- Be fitted with an "active" air pollution control device;
- Have pre-control device potential emissions that exceed applicable major source thresholds; and
- Not be subject to certain regulations that specifically exempt it from CAM.

Emission units are any part or activity of a stationary source that emits or has the potential to emit any air pollutant. The petroleum storage tanks and the tank truck load rack are emission units.

The CAM rule does not apply to the petroleum storage tanks because of the following:

1. The floating roofs and seals on the petroleum storage tanks are classified as passive controls.

The CAM rule does not apply to the tank truck load rack because of the following:

1. The petroleum tank truck load rack does not have a control device.

Insignificant Activities:

Per HAR §11-60.1-82(f)(1).

1. Tanks ID Nos. 20TD1, 20TD2, 20TD3, 20TD4, 20TD6, 2010, T-152, portable chemical tanks.

Per HAR §11-60.1-82(f)(7).

2. Meter stations, sampling points and filters.
3. Pump and tank degassing operations.
4. Gasoline pump for onsite fueling.
5. Mercury in instrument and gauge repair.
6. Oily sewer and storm water vents.
7. Maintenance and cleaning activities, including housekeeping and black oil tank sludge removal.
8. Additives, promoters, passivators, and anti-foam agents.
9. Insignificant heavy liquids. Tank ID Nos. 101, 102, 170, 171, 174, 176-184, 185, 103, 151-158, 160, 161, 164, 165, 166, 268, 270, and 272.
10. Liquified petroleum gas (LPG) storage tanks.
11. Asphalt tanks.
12. Storage of regulated pollutants not in VOC service. Tank ID No. T-175.

13. Storage of non-regulated pollutants. Tank ID No. T-120.
14. Miscellaneous diesel powered equipment. EP-2088 LPG Area Firewater Pump, EP-2076 Tank Farm Firewater Pump, UNL-136 Main Gate Emergency Generator, UNL-137 Gate #2 Emergency Generator, and UNL-138 Firehouse Emergency Generator.
15. One (1) 150 hp ultra-low sulfur diesel fired boiler (5.02 MMBtu/hr) used for the Black Oil Tank cleaning project.
16. Five (5) Jet Fuel Storage Tanks (note that these tanks are not subject to 40 CFR Part 63, Subpart BBBBBB since this regulation applies only to the storage of gasoline, and jet kerosene does not meet the definition of gasoline. These tanks also are not subject to 40 CFR Part 60, Subpart Kb, since the total vapor pressure from the jet kerosene tanks are below 3.5 kPa, the Subpart Kb cutoff for these tank capacities.)

    a. One (1) - 135,000 bbl internal floating roof storage tank, Tank ID No.114; and
    b. Four (4) – 275,000 bbl internal floating roof storage tanks, Tank ID Nos. 115, 141, 142, and 143.

17. Three (3) Recovered Oil and Transmix Storage Tanks

    a. Two (2) - 4,700 bbl external floating roof storage tanks, Tank ID Nos. 162 and 163; and
    b. One (1) - 19,200 bbl external floating roof storage tank, Tank ID No. 235.

18. One (1) – 30,000 bbl external floating roof storage tank, Tank ID No. 116, for storing water for hydrotesting or storing oily water.

Alternate Operating Scenarios:

There are no alternate operating scenarios proposed for this facility.

Project Emissions:

The emissions from the terminal will consist of VOCs and HAPs. A summary of the total potential annual emissions from the terminal are shown below.

SUMMARY OF POTENTIAL POLLUTANT EMISSIONS[1]

Sources	VOC (tpy)	Total HAPs (tpy)
Loading Rack	210.7	19.963
Tanks	121.6	2.793
Process Fugitives	4.1	1.125
Totals	336.4	23.88

[1]Potential emissions are based on the truck loading rack's gasoline throughput limit of 1,679,000 barrels per any rolling twelve (12) month period (193,000 gallons/day).

Ambient Air Quality Assessment (AAQA):

An ambient air quality impact assessment is not required for the following reasons: (1) VOCs do not have an ambient air quality standard, and (2) the Department of Health air modeling guidance generally exempts an applicant from performing an ambient air quality impact assessment for fugitive sources (storage tanks, pipe leaks, etc.).

Significant Permit Conditions:

1. Attachment IIA, Special Condition No. B.1

    1. The gasoline intermediates and finished product storage tanks are subject to the provisions of the following federal regulations when storing gasoline (any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines):

        a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and
        b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

    Reason:
    CSP No. 0863-02-C consisted of the Fluid Catalytic Cracking Unit, Dimersol, and Alkylation Plants. With the closure of CSP No. 0863-02-C, CSP No. 0863-01-C can no longer be considered a part of a petroleum refinery, but is still a major source of VOCs and an area source of HAPs. It can now be classified as a petroleum bulk terminal and subject to only 40 CFR Part 63, Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities. The previous federal requirements, i.e., 40 CFR Part 63, Subpart CC; 40 CFR Part 60, Subpart GGG; 40 CFR Part 61, Subpart FF; and 40 CFR Part 68, are no longer applicable since this facility is not part of a petroleum refinery anymore and all associated permit conditions have been removed from the permit.

2. Attachment IIB, Special Condition No. B.1

    1. The petroleum truck loading rack is subject to the provisions of the following federal regulations when loading gasoline (any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines):

        a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and

b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

Reason:
CSP No. 0863-02-C consisted of the Fluid Catalytic Cracking Unit, Dimersol, and Alkylation Plants. With the closure of CSP No. 0863-02-C, CSP No. 0863-01-C can no longer be considered a part of a petroleum refinery, but is still a major source of VOCs and an area source of HAPs. It can now be classified as a petroleum bulk terminal and subject to only 40 CFR Part 63, Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities. The previous federal requirements, i.e., 40 CFR Part 63, Subpart CC; 40 CFR Part 60, Subpart GGG; 40 CFR Part 61, Subpart FF; and 40 CFR Part 68, are no longer applicable since this facility is not part of a petroleum refinery anymore and all associated permit conditions have been removed from the permit.

3. Attachment IIB, Special Condition No. C.1

1. The maximum throughput of motor gasoline (for the purpose of this limit, "motor gasoline" includes motor gasoline, naphtha, and blended ethanol) at the petroleum truck loading rack shall not exceed 1,679,000 barrels per any rolling twelve (12) month period.

Reason:
1. Revision of permit conditions for the truck loading rack to simplify and remove limits related to products no longer subject to regulations with the facility's change to a terminal source (diesel, jet fuel) and products that are no longer loaded at the rack (aviation gasoline).
2. Revision of the truck loading rack's gasoline throughput limit from 7,300,000 barrels to 1,679,000 barrels per any rolling twelve (12) month period (193,000 gallons/day) to establish area source status.

4. Removed LPG storage from the existing permit.

Reason:
The LPG storage is not being considered in gasoline service. LPG is an overhead gas, not a "petroleum distillate," and is therefore not applicable under 40 CFR Part 63, Subpart BBBBBB.

5. Removed Attachment II – GHG: Special Conditions – GHG Reduction Requirements and the Monitoring Report Form: GHG Emissions from the existing permit.

Reason:
Subchapter 11: Greenhouse Gas Emissions – is not applicable since it's potential to emit GHG emissions as a covered source facility is less than 100,000 tpy as CO_2e.

6. Removed Attachment IIB, Special Condition E.5. from the existing permit.

    5. The permittee shall notify the Department at least **thirty (30) days** or such lesser time as designated and approved by the Department, prior to changing the VOL stored in any of the storage tanks identified in Section A.1.a of this attachment.

    Reason:
    This permit condition is not necessary since the permittee has no plans to store products other than gasoline and gasoline intermediates in these tanks. The potential emissions of these tanks are based on a true vapor pressure of less than 11.0 psia.

Conclusion and Recommendations:

Recommend issuance of the renewal of CSP No. 0863-01-C, subject to the significant permit conditions above. A thirty (30) day public comment period and a forty-five (45) day EPA review period are also required.

Reviewer: Darin Lum
Date: 5/2023

Application
and
Supporting Information

HAND DELIVERED
NOV 14 2022

Mark Dangler
Vice President - Logistics

Island Energy Services, LLC
91-480 Malakole Street
Kapolei HI 96707-1807
Tel 808-682-2299
Fax 808-682-2214
MDangler@islandenergyservices.com

November 14, 2022

HAND DELIVERED

Ms. Marianne Rossio
Manager, Clean Air Branch
Hawaii Department of Health
2827 Waimano Home Road
Hale Ola Building, Room 130
Pearl City, HI 96782

IES Downstream, LLC – Kapolei Terminal
Covered Source Permit (CSP) 0863-01-C
Permit Renewal and Minor Modification

Dear Ms. Rossio,

IES Downstream, LLC (IES) submits the enclosed permit renewal and minor modification application for the petroleum product terminal IES owns and operates in Kapolei, HI, referred to herein as the Kapolei Terminal.

IES is applying for renewal of the terminal's Covered Source Permit (CSP) 0863-01-C issued by the Hawaii Department of Health (HDOH). This permit was issued on November 16, 2018, and subsequently amended on August 6, 2020, and September 1, 2021. This renewal application includes a redline permit, listing proposed changes to the text of the current CSP. IES is also applying for a minor modification to the permit, as well as requesting administrative amendment of the permit's list of insignificant activities.

A CSP renewal application is required to incorporate all applicable requirements, under Hawaii Administrative Rules (HAR) Chapter 11-60.1, §11-60.1-101, just as an initial CSP application would. This CSP renewal application presents applicable requirements for the Kapolei Terminal as a petroleum products terminal, a major source of Volatile Organic Compounds (VOC), and, after the proposed changes to the permit covered under this renewal application, an area source for Hazardous Air Pollutants (HAP). All applicable requirements for the CSP renewal application are assessed and presented in the redline of the CSP conditions, enclosed.

As a bulk terminal, and an area source of HAP, the Kapolei Terminal is now subject to 40 CFR 63 Subpart BBBBBB, "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities," rather than Subpart CC, "National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries." Requirements for petroleum refineries under Part 60, Subpart GGG, and Part 61, Subpart FF, are removed. To establish the terminal's HAP area source status, a revised limit for gasoline loading at the truck loading rack is proposed in the renewed permit. Reporting forms in the CSP are revised as well.

IES is also requesting a minor modification to this permit. The proposed minor modification would convert some tanks into jet kerosene storage; remove tank 251; and remove throughput limits at the facility's truck rack for products that are not subject to regulation (diesel, jet fuel) and products that are no longer loaded at the rack (aviation gasoline). IES is seeking review of the proposed minor modification and response from HDOH under HAR §11-60.1-103(c) and (e).

IES is also proposing administrative amendments to add equipment to the CSP's list of insignificant activities. IES is proposing to construct five new tanks for jet kerosene service, each of which meets the insignificant activity thresholds of §11-60.1-82(f)(7). IES is seeking concurrence that the new jet kerosene tanks meet the insignificant activity thresholds and may be constructed according to paragraph (e) of §11.60.1-82.

The required application forms and supplemental attachments are included in Appendix A of the report. These forms contain the required information for the renewal, including the Responsible Official's signature certifying compliance. All Federal and State requirements applicable to this facility are identified in the application report, and compliance status is indicated on the forms and attachments in Appendix A. The appendices included in the report include the required application forms for the CSP renewal (Appendix A), a current plot plan of the terminal (Appendix B), all Potential To Emit (PTE) calculations for each emission source at the terminal (Appendix C), and a redline markup of the current CSP (Appendix D).

Should you have questions or require further information, please contact Gail Godenzi, Technical Manager, at (808) 682-3113, or gail.godenzi@islandenergyservices.com.

Sincerely,

Mark Dangler
Vice President - Logistics

cc: Chief , attn: AIR-3
Permits Office, Air Division, U.S. EPA Region 9
75 Hawthorne St
San Francisco, CA 94105

PROJECT REPORT
IES Downstream, LLC >
Kapolei Terminal

Kapolei Terminal
Renewal Application
for Covered Source Permit 0863-01-C

Prepared By:

Harold Laurence, P.E. – Managing Consultant
Sam Najmolhoda – Senior Consultant
John Goetze – Senior Consultant

TRINITY CONSULTANTS
20819 72nd Ave. S.
Suite 610
Kent, WA 98032
(253) 867-5600

TABLE OF CONTENTS

LIST OF TABLES

1. EXECUTIVE SUMMARY

IES Downstream, LLC (IES) owns and operates a petroleum product terminal in Kapolei, HI referred to herein as the Kapolei Terminal. IES is requesting a permit renewal for the terminal's Covered Source Permit (CSP) 0863-01-C. This permit was issued on November 16, 2018, and subsequently amended on August 6, 2020, and September 1, 2021.

The Kapolei Terminal is a major source of Volatile Organic Compounds (VOC) and, after the proposed changes to the permit covered under this renewal application, will be an area source for Hazardous Air Pollutants (HAP). This report includes the requirements for renewal of CSP 0863-01-C. This renewal application includes a redline permit, listing proposed changes to the text of the current CSP.

In this document, IES proposes several changes to the CSP 0863-01-C permit text that meet the definition of either an "administrative amendment" or a "minor modification" in the Hawaii Administrative Rules (HAR) Chapter 11-60.1. IES requests that the minor modifications be subject to the minor modification review outlined in HAR §11-60.1, including issuance of the completeness letter and subsequent approval under HAR §11-60.1-103(c) and (e).

- Administrative Amendments
  - Changes to the insignificant activity list for the terminal, including addition of jet kerosene tanks and a boiler.
- Minor Modifications
  - Revisions to storage tank products to convert some tanks from gasoline and finished products storage to jet fuel storage (See redline permit in Appendix D for details)
  - Removal of Tank 251 from the permit, which is out of service.

Revision of permit conditions for truck loading rack to simplify and remove limits related to products no longer subject to regulations with the facility's change to a terminal source (diesel, jet fuel) and products that are no longer loaded at the rack (aviation gasoline)
Additional changes are made to incorporate all applicable requirements, as required under §11-60.1-101. The changes to the permit proposed herein are as follows:

- Addition of references to federal regulations applicable to terminal sources that are area sources of HAP:
  - 40 CFR Part 63, NESHAP, Subpart BBBBBB: National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
    - Including renaming of Attachment IIA to CSP 0863-01-C to clarify that compliance requirements in that attachment apply to equipment in gasoline service.
- Revision to permitted gasoline loading rack throughput to establish area source status
- Removal of references to federal regulations applicable exclusively to refineries to reflect the facility's change to a terminal source:
  - 40 CFR Part 60, NSPS, Subpart GGG: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
  - 40 CFR Part 61, NESHAP, Subpart FF: National Emission Standard for Benzene Waste Operations
  - 40 CFR Part 63, NESHAP, Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries
- Updates to reporting forms to reflect the above changes (See redline permit in Appendix D for details)

This application contains the following sections:

- Description of Facility;
- Compliance with Applicable Requirements;
- Appendix A: Application Forms;
- Appendix B: Plot Plan;
- Appendix C: Emission Calculations;
- Appendix D: Proposed Permit Conditions

As demonstrated by Section 3, "Compliance with Applicable Requirements," this application report with appendices contains all required information for a complete permit renewal application. A renewal application fee of $3,000 is included for the renewal application per §HAR 1160.1-113, as the terminal is a major source and a "toxic" source (i.e., subject to a rule in 40 CFR Part 63) according to §HAR 11-60.1-111.

2. DESCRIPTION OF FACILITY

2.1 Applicant's Name and Business Description

IES Downstream, LLC (IES) is submitting this application on behalf of the Kapolei Terminal facility. Please refer to Appendix A for a complete set of Covered Source Permit (CSP) renewal forms on standard State of Hawaii Department of Health (HDOH) form templates.

2.2 Application Type

This application is for the renewal of CSP 0863-01-C, the CSP for the Kapolei Terminal. This application package also contains written requests for several administrative amendments to the permit text. This application is made to HDOH pursuant to Hawaii Administrative Rules, Title 11, Chapter 11-60.1, Air Pollution Control.

2.3 Facility Description

2.3.1 Location

The facility is located at 91-480 Malakole Street, Kapolei, HI, at a latitude of 21° 18' 50" N and a longitude of 158° 6' 49" W on the island of Oahu. A map of the area surrounding the project site, along with the location of the facility, is included in Appendix B.

2.3.2 Existing Equipment

The Kapolei Terminal currently operates existing equipment in CSP 0863-01-C, except as described in the proposed minor modifications in Section 2.4.3, below. An inventory of Potential to Emit (PTE) of criteria pollutants and Hazardous Air Pollutants (HAP) for emission points to remain in CSP 0863-01-C is provided in Appendix C to this renewal application.

Table 2-1 lists which tanks are listed as Insignificant Emission Units (I) or as emission units that do not meet the definition of "insignificant" (S). Most of the tanks at the Kapolei Terminal do not constitute insignificant emission units given one of the following criteria:

- The capacity of the tanks is greater than 40,000 gallons, so the exemption in HAR §11-60.1-82(f)(1) does not apply.
- The emissions from the tanks are greater than 2 tons per year of VOC.

In the case of several jet kerosene tanks, however, the tanks would be considered insignificant emission units because the emissions are less than 2 tons per year of VOC, and they are not subject to any federal regulations.

- NESHAP BBBBBB only applies to tanks that store product that meet the definition of "gasoline," and jet kerosene does not.
- Total vapor pressure from the jet kerosene tanks are below 3.5 kPa, which is the applicability cutoff for NSPS Kb.

The status of each Kapolei tank (insignificant or significant) is shown in Table 2-1 below.

Table 2-1. Storage Tank Contents and Status

Tank #	Current Liquid Service	Volume (gallons)	Significance Status	New Tank?
KAP104	Jet Kerosene	6,209,300	I	No
KAP105	Crude Oil	11,555,548	S	No
KAP106	Crude Oil	11,555,548	S	No
KAP107	Jet Kerosene	11,519,152	I	No
KAP108	Crude Oil	10,136,126	S	No
KAP109	Crude Oil	11,537,350	S	No
KAP110	Crude Oil	13,304,677	S	No
KAP111	Gasoline	13,220,736	S	No
KAP113	Oily Water	994,012	S	No
KAP114	Military Jet Kerosene	5,670,000	I	Yes
KAP115	Jet Kerosene	11,550,000	I	Yes
KAP141	Jet Kerosene	11,550,000	I	Yes
KAP142	Jet Kerosene	11,550,000	I	Yes
KAP143	Jet Kerosene	11,550,000	I	Yes
KAP151	Low-Sulfur Fuel Oil	3,412,071	S	No
KAP152	Low-Sulfur Fuel Oil	3,412,071	S	No
KAP153	Low-Sulfur Fuel Oil	2,544,954	S	No
KAP154	Out of Service	1,671,915	S	No
KAP155	Jet Kerosene	4,197,130	S	No
KAP156	Jet Kerosene	4,197,130	I	No
KAP157	Jet Kerosene	3,168,432	I	No
KAP158	Jet Kerosene	4,197,130	S	No
KAP160	Jet Kerosene	4,197,130	I	No
KAP161	Jet Kerosene	4,197,130	S	No
KAP162	Recovered Oil	198,327	S	No
KAP163	Recovered Oil	210,975	S	No
KAP165	Low-Sulfur Fuel Oil	1,671,915	S	No
KAP166	Low-Sulfur Fuel Oil	424,453	S	No
KAP232	Gasoline	853,018	S	No
KAP233	Gasoline	853,018	S	No
KAP235	Transmix	853,018	S	No
KAP236	Gasoline	1,671,915	S	No
KAP237	Gasoline	1,671,915	S	No
KAP249	Jet Kerosene	404,161	I	No
KAP250	Jet Kerosene	210,975	I	No
KAP252	Gasoline	1,671,915	S	No
KAP253	Gasoline	1,671,915	S	No
KAP254	Gasoline	1,461,833	S	No
KAP255	Gasoline	1,671,915	S	No
KAP256	Gasoline	1,671,915	S	No
KAP257	Gasoline	1,265,850	S	No
KAP258	Gasoline	1,265,850	S	No
KAP262	Gasoline	1,265,850	S	No
KAP263	Jet Kerosene	1,671,915	I	No
KAP264	Jet Kerosene	1,671,915	I	No
KAP265	Jet Kerosene	1,804,732	I	No
KAP266	Gasoline	1,804,732	S	No

Tank #	Current Liquid Service	Volume (gallons)	Significance Status	New Tank?
KAP267	Jet Kerosene	1,804,732	I	No
KAP268	Diesel	1,671,915	S	No
KAP269	Naphtha	1,015,162	S	No
KAP270	Diesel	1,671,915	S	No
KAP271	Naphtha	1,671,915	S	No
KAP272	Diesel	1,671,915	S	No
KAP273	Gasoline	853,018	S	No
KAP274	Jet Kerosene	2,134,377	I	No
KAP275	Gasoline	213,924	S	No

2.4 Proposed Permit Changes

Proposed permit changes for this renewal application include administrative permit amendments, minor modifications, insignificant activities, and updates to the regulatory bases for permit conditions given the change in operations at the Kapolei Terminal from a refinery to a terminal. A summary of each of the Hawaii Administrative Rule requirements for these permit changes is provided in Section 3.2, and the changes to the permit are summarized below.

2.4.1 Administrative Permit Amendments

The changes classified as administrative permit amendments are the addition of insignificant activities in Section 2.4.2 below.

2.4.2 Insignificant Activities

Section 11-60.1-82(f) requires the insignificant activities listed in this subsection to be identified in the CSP application.

- (1) Diesel-fired boiler with a rated capacity of 150 boiler horsepower, which equates to approximately 5.02 MMBtu/hr firing capacity.[1]
- Jet kerosene tanks identified as insignificant activities in Table 2-1, above.

The remaining insignificant activities are the same as the current CSP, except for the addition of the boiler and the jet kerosene tanks. These changes are considered administrative permit amendments, which encompass incorporating applicable requirements for insignificant activities.

2.4.3 Minor Modifications to Facility

Per HAR 11-60.1-81, a "minor modification," to summarize the rule, must not:

- Increase emissions above permitted limits
- Increase the emissions of any air pollutant not limited by permit to levels equal to or above:
  (A) 500 pounds per year of a hazardous air pollutant, except lead;

[1] Calculations of actual emissions from this boiler qualify it as an insignificant activity by being below applicable emissions thresholds in Section 11.60.1-82(f)(7). This finding was confirmed via email from Darin Lum (HDOH) to Gail Godenzi (IES) on October 27, 2021. A follow up insignificant activity notification was provided to HDOH dated February 1, 2022 and contained boiler emissions calculations supporting the determination of insignificance per §82(f)(7).

(B) 300 pounds per year of lead;
(C) Twenty-five percent of significant amounts of emission as defined in section 11-60.1-1, paragraph (1) in the definition of "significant"; or
(D) Two tons per year of each regulated air pollutant not already identified above

- Violate any applicable requirements
- Involve significant changes to relax monitoring, reporting, or recordkeeping requirements
- Require or change a case-by-case determination of an emission limitation or standard, source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis
- Seek to establish or change a permit term or condition with no corresponding underlying applicable requirement to which the source would otherwise be subject
- Constitute a modification pursuant to any provision of Title I of the Clean Air Act.

The addition of 5 tanks to the facility permit for jet kerosene service constitutes a minor modification, as there are no emissions of HAP greater than 500 pounds, lead greater than 300 pounds, or VOC emissions greater than 10 tons per year (or 25% of the significant emission threshold for VOC of 40 tons per year). Details of the emission calculations can be found in the PTE calculations included in Appendix C.

The following changes to the permit are also considered minor modifications:

- Revisions to storage tank products to convert some tanks from gasoline and finished products storage to jet fuel storage (See redline permit in Appendix D for details)
- Removal of Tank 251 from the permit, which is out of service.
- Revision of permit conditions for truck loading rack for the following:
  - Simplifying and removing limits related to products no longer subject to regulations with the facility's change to a terminal source (diesel, jet fuel)
  - Removing products that are no longer loaded at the rack (avgas)

It is worth noting that this application proposes a permit modification with a new, lower gasoline throughput limit: a 12-month rolling daily average throughput limit of 193,200 gallons per day, to establish HAP area source status. This limit is more restrictive than the 250,000 gallons per day threshold that would make the loading rack subject to the requirements in NESHAP BBBBBB Table 2 item 1. IES requests that the minor modifications above be subject to the minor modification review outlined in HAR §11-60.1, including issuance of the completeness letter and subsequent approval under HAR §11-60.1-103(c) and (e).

2.4.4 Updates to Applicable Requirements in Renewed CSP

The following changes are not minor modifications themselves, but rather represent changes to the applicable requirements that are necessary for an accurate CSP renewal application. This renewal application seeks to establish that the terminal will be a nonmajor source (area source) of HAP, subject to the NESHAP for area source bulk gasoline terminals (NESHAP Subpart BBBBBB). To that end, the terminal's gasoline loading rack throughput is revised downward, and requirements from Subpart BBBBBB replace those of Subpart CC.

- Revision to existing permit condition limiting gasoline throughput at the loading rack, representing a decrease in permitted throughput compared with the current permit. This revision establishes that the Kapolei Terminal will remain an area source of HAP.
- Removal of references to federal regulations applicable exclusively to refineries, reflecting the facility's change to a terminal source;
  - 40 CFR Part 60, NSPS, Subpart GGG: Standards of Performance for Equipment Leaks in Petroleum Refineries

- 40 CFR Part 61, NESHAP, Subpart FF: National Emission Standard for Benzene Waste Operations
- 40 CFR Part 63, NESHAP, Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

► Addition of references to federal regulations applicable to terminal sources:
- 40 CFR Part 63, NESHAP, Subpart BBBBBB: National Emission Standards for Hazardous Air Pollutants for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
  - Including renaming of Attachment IIA to CSP 0863-01-C to clarify that compliance requirements in that attachment apply to equipment in gasoline service.

► Updates to reporting forms to reflect the above changes (See redline permit in Appendix D for details)

2.5 Facility Potential to Emit

Annual emissions are provided for the Kapolei Terminal to provide documentation of its covered source status in its current capabilities. The emissions are Potential to Emit (PTE) for the facility to demonstrate compliance under all possible operational scenarios. The PTE in Appendix C provides additional details regarding the method of calculation. A summary of PTE is provided in Table 2-2.

Table 2-2. Potential to Emit

Sources	PTE (ton/yr)					
	CO	NO_X	VOC	PM	SO_2	Pb
Loading Rack	-	-	210.7	-	-	0.0
Tanks	-	-	121.6	-	-	0.0
Process Fugitives	-	-	4.1	-	-	0.0
Totals	**-**	**-**	**336.4**	**-**	**-**	**0.0**

There are three main source groups that contribute to the total emissions from the facility, which are outlined in the three subsections below.

2.5.1 Loading Emissions

Truck loading operations at the Kapolei Terminal consist of the loading of fuel products to trucks in lanes equipped with loading arms. The rack has historically loaded a range of fuels including aviation gasoline, ethanol, motor gasoline, jet fuel, naphtha, and diesel. Going forward, aviation gasoline will no longer be loaded at the loading rack. This application presents a single "gasoline" throughput potential, covering motor gasoline and naphtha as well as blended ethanol. IES is revising the existing permit limit of 7,300,000 barrels / rolling 12-months (306,600,000 gallons / rolling 12-months) for the maximum throughput of gasoline to a new limit of 1,679,000 barrels / rolling 12-months (70,518,000 gallons / rolling 12-months), a decrease. This operational limit is developed to correspond with a facility-wide PTE for HAP emissions of less than 25 tons per year, which results in the facility becoming an area source for HAP emissions under the National Emission Standards for Hazardous Air Pollutants (NESHAP). In this permit limit, as in the attached calculations, gasoline is defined as *blended ethanol, motor gasoline, and naphtha*.

The rack is also capable of loading diesel and jet, though estimated VOC emissions per barrel of diesel and jet are less than 1% of the magnitude of emissions of the products categorized as 'gasoline' in the permit.

HAP emissions are calculated by applying speciated stream information to the product liquids. Vapor speciation is based on calculations of storage tank vapor space concentrations for each liquid stored in the facility's tanks. Details regarding the equations used for emission calculations are included in Appendix C.

The truck rack loading operation is not considered an insignificant activity in this CSP renewal application.

Emissions from loading operations from truck rack are emitted via fugitive loading emissions. The methods for calculating loading rack emissions are included as footnotes to the PTE emission calculations in Appendix C.

2.5.2 Tank Emissions

The PTE for the storage tanks is calculated using TankESP, a software tool that correctly implements the equations of AP-42 Section 7.1, EPA's emission factor guide for organic liquid storage tanks. This software program uses the inputs for the physical construction of each tank, the fittings and controls available for the floating roof tanks, liquid characteristics and speciation data for each stock that moves through the terminal, and meteorological data for a representative location. The TankESP output report for the Kapolei Terminal is included as part of the tank emission calculations in Appendix C.[2] Additional details can be found in the TankESP file in Appendix C.

2.5.3 Equipment Component Fugitive Emissions

Calculations for equipment fugitive emissions account for the VOC that escapes from piping components such as valves, flanges, pump seals, open-ended lines, sample ports, and pressure release valves. A count was performed for all types of components in 2021 and that count was used for reporting year 2021 annual emissions inventory reporting in 2022. Those component counts are used in this renewal application's calculations as well. The emission factors for calculating the total VOC losses are taken from the 1995 EPA document "Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-07)." Based on the definitions of heavy and light liquid used in the EPA document, all HTT equipment is in light liquid service.

One notable change in the basis for equipment component fugitive emissions PTE calculations is the category of emission factors selected. While equipment leaks from the Kapolei Terminal have historically been calculated using refinery-specific fugitive emission factors, the terminal emission factors are used for this permit renewal application and are identified as the appropriate emission factors for facility actual emissions moving forward. Refinery sources, by nature, operate at higher temperatures and pressures, corresponding with higher vapor pressures for the products (and by extension greater VOC emissions). Emissions from terminal source equipment leaks are therefore expected to be lower, as demonstrated in the notable decrease in VOC emissions from the fugitive leaks in the facility's current PTE (as compared to the PTE developed for the 2018 renewal application).

Details showing the calculations and exact emission factors used to determine the total fugitive emissions from process equipment fugitives are provided in Appendix C. In addition to calculating VOC totals, emissions of HAPs are determined by applying speciated stream information to the product liquids. In cases where product liquid could have a range of HAP speciation, the stock with the greatest weight percent of each HAP species is used when calculating the HAP emissions.

---

[2] The output report contains the calculated values and emissions for each tank, but does not list the input values used in the calculations. Input values are listed as a standalone table in this application.

3. COMPLIANCE WITH APPLICABLE REQUIREMENTS

The following sections outline this application's required information and the applicability of state and federal requirements to the proposed CSP renewal.

3.1 Permit Application Requirements

This application proposes three types of changes to the CSP:

- Changes meeting the definition of "administrative permit amendment" in §11-60.1-1. These changes are identified in section 2.4.1 and 2.4.2.
- Changes meeting the definition of a "minor modification" in §11-60.1-81. These changes are identified in section 2.4.3.
- Changes required to incorporate all applicable requirements. These changes are identified in section 2.4.4. Per §11-60.1-101, a complete CSP renewal application must include an identification of all applicable requirements, just as an initial CSP would under §11-60.1-83(a)(7). Applicable requirements in the proposed permit for the facility are those that apply to petroleum terminals.

This application is intended to be a complete application under the completeness requirements for each of these types of changes.

3.2 State Requirements

3.2.1 HAR Subchapter 1

The following sections of HAR 11-60.1 Subchapter 1 are applicable to this CSP renewal application:

- §11-60.1-1 Definitions
- §11-60.1-2 Prohibition of air pollution
- §11-60.1-3 General conditions for considering applications
- §11-60.1-4 Certification
- §11-60.1-6 Holding of permit
- §11-60.1-7 Transfer of permit
- §11-60.1-8 Reporting discontinuance
- §11-60.1-9 Cancellation of a non-covered or covered source permit
- §11-60.1-11 Sampling, testing, and reporting methods
- §11-60.1-14 Public access to information
- §11-60.1-15 Reporting of equipment shutdown
- §11-60.1-16 Prompt reporting of deviations
- §11-60.1-16.5 Emergency provision

§11-60.1-2 through 11-60.1-4 constitute the duty to file this permit application, and this permit application fulfills these requirements.

3.2.2 HAR Subchapter 2

The following sections of Subchapter 2, General Prohibitions, are applicable to the Kapolei Terminal as stated in the current CSP. Applicability will not change in the renewal.

- §11-60.1-31 Applicability

- §11-60.1-32 Visible Emissions
- §11-60.1-33 Fugitive Dust
- §11-60.1-38 Sulfur oxides from Fuel Combustion
- §11-60.1-39 Storage of Volatile Organic Compounds
- §11-60.1-41 Pump and Compressor Requirements

3.2.3 HAR Subchapter 3

HAR 11-60.1 Subchapter 3, Open Burning, does not apply to the Kapolei Terminal's emission points.

3.2.4 HAR Subchapter 4

HAR 11-60.1 Subchapter 4, Non-covered Sources, does not apply to this permit application or the terminal, because the Kapolei Terminal is a covered source.

3.2.5 HAR Subchapter 5

The following sections of Subchapter 5, Covered Sources, are applicable to this application:

- §11-60.1-81 Definitions
- §11-60.1-82 Applicability
- §11-60.1-84 Duty to supplement or correct permit applications
- §11-60.1-85 Compliance Plan
- §11-60.1-86 Compliance certification of Covered Sources
- §11-60.1-88.5 Permit action on insignificant activities
- §11-60.1-89 Permit term
- §11-60.1-90 Permit content
- §11-60.1-93 Federally-enforceable permit terms and conditions
- §11-60.1-94 Transmission of information to the Administrator
- §11-60.1-95 EPA oversight.
- §11-60.1-96 Operational Flexibility
- §11-60.1-101 Covered source permit renewal
- §11-60.1-102 Administrative permit amendment
- §11-60.1-103 Applications for minor modifications

3.2.6 HAR Subchapter 6

The following sections of Subchapter 6, Fees for Covered Sources, Noncovered Sources, and Agricultural Burning, are applicable to this CSP renewal application:

- §11-60.1-111 Definitions
- §11-60.1-112 General fee provisions for covered sources
- §11-60.1-113 Application fees for covered sources
- §11-60.1-114 Annual fees for covered sources
- §11-60.1-115 Basis of annual fees for covered sources

Fees under §11-60.1-114, Annual fees for covered sources, are not part of this application but will continue to be applicable to the terminal based on actual emission estimates from the terminal's emission points.

3.2.7 HAR Subchapter 7

HAR 11-60.1 Subchapter 7, Prevention of Significant Deterioration Review, does not apply to this CSP renewal application. Subchapter 7 applies to major modifications, defined as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulations approved pursuant to the Act." Because the changes in this renewal do not constitute a Subchapter 7 major modification, Subchapter 7 does not apply to this application.

3.2.8 HAR Subchapter 8

The following sections of Subchapter 8, Standards of Performance for Stationary Sources, are no longer applicable as of this CSP renewal application:

- §11-60.1-161 New Source Performance Standards

§11-60.1-161, New Source Performance Standards, was historically listed as applicable because the Kapolei Terminal operated as a refinery source and was subject to the requirements of NSPS Subpart GGG: Standards of Performance for Equipment Leaks in Petroleum Refineries. The facility is no longer a refinery source, and therefore no longer operates sources subject to the requirements of that subpart.

The Kapolei Terminal does not operate any affected facilities under NSPS Subparts K, Ka, Kb, or XX. Therefore, as a bulk terminal, KAP is not subject to any NSPS at the time of this application. Further information is provided below.

3.2.9 HAR Subchapter 9

The following sections of Subchapter 9, Hazardous Air Pollutant Sources, are applicable to this application. However, this renewal and associated changes do not constitute a modification to the Kapolei Terminal. Therefore, compliance with Subchapter 9 does not require additional review.

- §11-60.1-171 Definitions
- §11-60.1-173 Applicability
- §11-60.1-178 Accidental releases

§11-60.1-173, Applicability, is listed as applicable because the Kapolei Terminal is a stationary source that emits HAP.
§11-60.1-179, Ambient air concentrations of hazardous air pollutants, is not applicable because this section applies only to major sources of HAP. As a result of the proposed permit amendments, the facility is an area source of HAP emissions. Therefore, this permit renewal application is not subject to HAP ambient air concentrations review.

3.2.10 HAR Subchapter 10

HAR 11-60.1 Subchapter 10, Field Citations, establishes HDOH's field citations program. It does not contain applicable requirements for air permitting.

3.2.11 HAR Subchapter 11

Historically, the Kapolei Terminal was subject to HAR 11-60.1 Subchapter 11, Greenhouse Gas Emissions, when the facility was a refinery source. As of this permit renewal application, however, IES's CSP for the refinery units has been cancelled and Subchapter 11 no longer applies to the Kapolei Terminal because it is a covered source with a potential to emit GHG less than 100,000 tpy as CO_2 equivalent (CO_2e).

3.3 Federal Requirements

Several federal regulations with relevance (though not necessarily applicability) to the Kapolei Terminal operations are presented here, and the applicability status has changed in several cases since the time of the previous CSP renewal application. These federal regulations are primarily subparts of the New Source Performance Standards (NSPS) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 60 and 63, respectively.

NSPS are codified in 40 CFR 60, and NESHAPs have been established in 40 CFR Part 61 and Part 63. NSPS apply to certain types of equipment that are newly constructed, modified, or reconstructed after a given applicability date. The applicability of NESHAP rules often depends on a facility's major source status with respect to HAP emissions. Under 40 CFR Part 63, a major source is defined as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP." The following NSPS and NESHAP are reviewed for applicability to the emission units in the terminal's current CSP.

3.3.1 NSPS Subpart GGG, NESHAP Subpart FF, and NESHAP Subpart CC

The following regulations were previously applicable to the the Kapolei Terminal facility when the facility operated as a refinery:

- 40 CFR Part 60, NSPS, Subpart GGG: Standards of Performance for Equipment Leaks in Petroleum Refineries
- 40 CFR Part 61, NESHAP, Subpart FF: National Emission Standard for Benzene Waste Operations
- 40 CFR Part 63, NESHAP, Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

The facility is no longer a refinery, but rather a bulk terminal source. Therefore, the Kapolei Terminal no longer meets the definition of sources subject to each of these subparts, and these regulations are no longer applicable for the the Kapolei Terminal facility.

3.3.2 NSPS Subparts K, Ka, and Kb

The Kapolei Terminal contains several storage tanks used for the storage of various fuel products, intermediates, crude oil, and transmix. NSPS Subparts K, Ka, and Kb of 40 CFR 60 apply to storage vessels for petroleum liquids that have a capacity greater than 40,000 gallons (952 bbl). These subparts apply, respectively, to storage vessels that undergo construction, reconstruction, or modification from June 11, 1973 - May 19, 1978, May 18, 1978 - July 23, 1984, and July 23, 1984 to the present day.

All current tanks at the Kapolei Terminal were constructed prior to 1973, and no changes have been made to the operation of tanks at the facility that would constitute a modification under Subpart Kb; therefore, the Kapolei Terminal is not subject to any of these NSPS subparts.

Proposed tanks in this application will be exempt from Subpart Kb on the basis of their vapor pressure, though their construction dates will be later than the July 23, 1984 applicability date.

3.3.3 NSPS Subpart XX

The loading rack in operation at the Kapolei Terminal loads fuel into trucks, including gasoline. NSPS Subpart XX, "NSPS for Bulk Gasoline Terminals", applies to loading racks at bulk gasoline terminals constructed after December 17, 1980, that deliver liquid product into gasoline tank trucks. Gasoline in this

subpart is defined as any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4 psia) or greater which is used as a fuel for internal combustion engines. The loading rack operation at the Kapolei Terminal was constructed prior to 1980, and no physical or operational changes have been made to the loading rack at the facility that would constitute a modification under Subpart XX; therefore, the Kapolei Terminal is not subject to this NSPS subpart.

3.3.4 NESHAP Subparts R, BBBBBB

The Kapolei Terminal is a bulk gasoline terminal. NESHAP Subpart BBBBBB, "NESHAP for Source Category: Gasoline Bulk Distribution Terminals, Bulk Plants, and Pipeline Facilities", continues to apply to this source. This subpart applies to each affected facility that that is not subject to NESHAP Subpart R, which is the major source equivalent of Subpart BBBBBB. The Kapolei Terminal is no longer a major source of HAP, as shown in the calculations in Appendix C, but does meet the definition of a bulk gasoline terminal. Therefore, NESHAP Subpart BBBBBB now applies to the Kapolei Terminal, and NESHAP Subpart R is no longer applicable.

Subpart BBBBBB applies to bulk gasoline terminals. Gasoline is defined in Subpart BBBBBB as "any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines." The Kapolei Terminal includes a liquified petroleum gas (LPG) processing, storage, and distribution area. LPG is not a petroleum distillate product and does not meet the Subpart BBBBBB definition of gasoline; therefore, equipment in LNG operation is not subject to Subpart BBBBBB.

3.3.5 NESHAP Subpart EEEE

NESHAP Subpart EEEE, "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)," applies to organic liquid distribution operations at major sources of HAP. Because the Kapolei Terminal is a nonmajor source (area source) of HAP, this subpart does not apply to the Kapolei Terminal.

3.4 Compliance Assurance Monitoring

This permit application does not include a Compliance Assurance Monitoring (CAM) plan for sources at the facility because there are no sources with installed emissions controls that have an uncontrolled PTE of 100 tpy or greater of any criteria pollutant.

APPENDIX A. APPLICATION FORMS

File/Application No.: _____

S-1: Standard Air Pollution Control Permit Application Form

(Covered Source Permit and Noncovered Source Permit)

State of Hawaii
Department of Health
Environmental Management Division
Clean Air Branch
P.O. Box 3378 • Honolulu, HI 96801-3378 • Phone: (808) 586-4200

1. Company Name: IES Downstream, LLC

2. Facility Name (if different from the Company): IES Downstream, LLC - Kapolei Terminal

3. Mailing Address: 91-480 Malakole St.

   City: Kapolei State: HI Zip Code: 96707

   Phone Number: (808) 682-5711

4. Name of Owner/Owner's Agent: Mark Dangler

   Title: Vice President - Logistics Phone: (808) 682-5711

   Mailing Address: 91-480 Malakole St.

   City: Kapolei State: HI Zip Code: 96707

5. Plant Site Manager/Other Contact: Mark Dangler

   Title: Vice President - Logistics Phone: (808) 682-5711

   Mailing Address: 91-480 Malakole St.

   City: Kapolei State: HI Zip Code: 96707

6. Permit Application Basis: (Check all applicable categories.)

   ☐ Initial Permit for a New Source ☐ Initial Permit for an Existing Source

   ☒ Renewal of Existing Permit ☐ General Permit

   ☐ Temporary Source ☐ Transfer of Permit

   ☒ Modification to a Covered Source: → Is Modification? ☐ Significant ☒ Minor ☐ Uncertain

   ☐ Modification to a Noncovered Source

7. If renewal or modification, include existing permit number: 0863-01-C

8. Does the Proposed Source require a County Special Management Area Permit? ☐ Yes ☒ No

9. Type of Source (Check One): ☐ Covered Source ☒ Covered and PSD Source

   ☐ Noncovered Source ☐ Uncertain

10. Standard Industrial Classification Code (SICC), if known: 5171

11. Proposed Equipment/Plant Location (e.g. street address): 91-480 Malakole Street

City: Kapolei State: HI Zip Code: 96707

UTM Coordinates (meters): East: 591,940 m E North: 2,357,220 m N

UTM Zone: 4 UTM Horizontal Datum: ☐ Old Hawaiian ☐ NAD-27 ☒ NAD-83

12. General Nature of Business: Petroleum Bulk Station and Terminal

13. Date of Planned Commencement of Construction or Modification: On or before December 1, 2022

14. Is ***any*** of the equipment to be leased to another individual or entity? ☐ Yes ☒ No

15. Type of Organization: ☒ Corporation ☐ Individual Owner ☐ Partnership

☐ Government Agency (Government Facility Code: _____)

☐ Other: _____

Any applicant for a permit who fails to submit any relevant facts or who has submitted incorrect information in any permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application, but prior to the issuance of the noncovered source permit or release of a draft covered source permit. (HAR §11-60.1-64 & 11-60.1-84)

RESPONSIBLE OFFICIAL (as defined in HAR §11-60.1-1)

Name (Last): Dangler (First): Mark (MI): _____

Title: Vice President - Logistics Phone: (808) 682-5711

Mailing Address: 91-480 Malakole St.

City: Kapolei State: HI Zip Code: 96707

Certification by Responsible Official (pursuant to HAR §11-60.1-4)

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

NAME (Print/Type): MARK DANGLER

(Signature): Mark Dangler Date: 11/10/2022

FOR AGENCY USE ONLY:

File/Application No.: _____

Island: _____

Date Received: _____

Submit the following documents as part of your application:

A. The ***Emissions Units Table***, filled in as completely as possible. Use separate sheets of paper as needed. General instructions include the following:

1. Identify each **emission point** with a unique number for this plant site, consistent with emission point identification used on the location drawing and previous permits; if known, provide the SICC number. Emission points shall be identified and described in sufficient detail to establish the basis for **fees** and applicability of requirement of HAR, Chapter 11-60.1. Examples of emission point names are: heater, vent, boiler, tank, baghouse, fugitive, etc. Abbreviations may be used.
   a. For each emission point use as many lines as necessary to list regulated and hazardous air pollutant data. For hazardous air pollutants, also list the Chemical Abstracts Service number (CAS#).
   b. Indicate the emission points that discharge together for any length of time.
   c. The **Equipment Date** is the date of equipment construction, reconstruction, or modification. Provide supporting documentation.

2. State the **maximum emission rates** in terms sufficient to establish compliance with the applicable requirements and standard reference test methods. Provide all supporting emission calculations and assumptions:
   a. Include all regulated and hazardous air pollutants and air pollutants for which the source is major, as defined in HAR §11-60.1-1. Examples of regulated pollutant names are: Carbon Monoxide (CO), Nitrogen Oxides (NO_X), Sulfur Dioxide (SO_2), Volatile Organic Compounds (VOC), particulate matter (PM), and particulate less than 10 microns (PM_{10}). Abbreviations may be used.
   b. Include fugitive emissions.
   c. **Pounds per hour (#/HR)** is the maximum potential emission rate expected by applicant.
   d. **Tons per year** is the annual maximum potential emissions expected by the applicant, taking into account the typical operating schedule.

3. Describe ***Stack Source Parameters***:
   a. **Stack Height** is the height above the ground.
   b. **Direction** refers to the exit direction of stack emissions: up, down or horizontal.
   c. **Flow Rate** is the actual, not the calculated, flow rate.

4. Provide any additional information, if applicable, as follows:
   a. If combinations of different fuels are used that cause any of the stack source parameters to differ, complete one row for each possible set of stack parameters and identify each fuel in the **Equipment Description**.
   b. For a rectangular stack, indicate the length and width.
   c. Provide any information on stack parameters or any stack height limitations developed pursuant to Section 123 of the Clean Air Act.

B. A **process flow diagram** identifying all equipment used in the process, including the following:
1. Identify and describe each emission point.
2. Identify the locations of safety valves, bypasses, and other such devices which when activated may release air pollutants to the atmosphere.

C. A **facility location map**, drawn to a reasonable scale and showing the following:
1. The property involved and all structures on it. Identify property/fence lines plainly.
2. Layout of the facility.
3. Location and identification of the proposed emissions unit on the property.
4. Location of the property and equipment with respect to streets and all adjacent property. Show the location of all structures within 100 meters of the applicant's emissions unit. Provide the building dimensions (height, length, and width) of all structures that have heights greater than 40% of the stack height of the emissions unit.

D. Provide a description of any proposed modifications or permit revisions. Include any justification or supporting information for the proposed modifications or permit revisions.

Company Name: ____________________ File No.: ________

Location: ____________________

(Make as many copies of this page as necessary) Page ____ of ____

EMISSIONS UNITS TABLE

Review of applications and issuance of permits will be expedited by supplying all necessary information on this table.

Emissions for the Kapolei Terminal are presented in Appendix C.
Source parameters are presented on the following page.

AIR POLLUTANT DATA: EMISSION POINTS				AIR POLLUTANT	AIR POLLUTANT EMISSION RATE		UTM Zone: ____ Horizontal Datum [a]: ____		STACK SOURCE PARAMETERS						
Stack No.	Unit No.	Equipment Name/ Description & SICC number	Equipment Date	Regulated/ Hazardous Air Pollutant Name & CAS#	#/ HR	Tons/ YR	Coordinates (mtrs)		Stack Height (mtrs)	Direction (u/d/h) [b]	Inside Diameter (mtrs)	Velocity (m/s)	Flow Rate (m^3/s)	Temp. (° K)	Capped (Y/N)
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								
							East								
							North								

[a] Specify UTM Horizontal Datum as Old Hawaiian, NAD-83, or NAD-27

[b] Specify the direction of the stack exhaust as u = upward, d = downward, or h = horizontal

Emission Unit ID	Emission Unit Description	UTM Easting (m)	UTM Northing (m)	UTM Zone	Datum	Stack height (ft)	Stack Diameter (ft)	Stack Velocity (ft/sec)	Stack Temperature (deg. F)	Stack Flow Rate (ACFS)
TkS104	Tk 104 External Floating Roof, Standing Loss	592,574	2,356,694	4	NAD 83	55.5	138			
TkW104	Tk 104 External Floating Roof, Withdrawal Loss	592,574	2,356,694	4	NAD 83	55.5	138			
TkS105	Tk 105 External Floating Roof, Standing Loss	592,675	2,356,692	4	NAD 83	63.5	176			
TkW105	Tk 105 External Floating Roof, Withdrawal Loss	592,675	2,356,692	4	NAD 83	63.5	176			
TkS106	Tk 106 External Floating Roof, Standing Loss	592,678	2,356,586	4	NAD 83	63.5	176			
TkW106	Tk 106 External Floating Roof, Withdrawal Loss	592,678	2,356,586	4	NAD 83	63.5	176			
TkS107	Tk 107 External Floating Roof, Standing Loss	592,782	2,356,695	4	NAD 83	63.3	176			
TkW107	Tk 107 External Floating Roof, Withdrawal Loss	592,782	2,356,695	4	NAD 83	63.3	176			
TkS108	Tk 108 External Floating Roof, Standing Loss	592,785	2,356,588	4	NAD 83	55.7	176			
TkW108	Tk 108 External Floating Roof, Withdrawal Loss	592,785	2,356,588	4	NAD 83	55.7	176			
TkS109	Tk 109 External Floating Roof, Standing Loss	592,577	2,356,582	4	NAD 83	63.4	176			
TkW109	Tk 109 External Floating Roof, Withdrawal Loss	592,577	2,356,582	4	NAD 83	63.4	176			
TkS110	Tk 110 External Floating Roof, Standing Loss	592,792	2,356,508	4	NAD 83	63.4	189			
TkW110	Tk 110 External Floating Roof, Withdrawal Loss	592,792	2,356,508	4	NAD 83	63.4	189			
TkS111	Tk 111 External Floating Roof, Standing Loss	592,793	2,356,427	4	NAD 83	63	189			
TkW111	Tk 111 External Floating Roof, W ithdrawal Loss	592,793	2,356,427	4	NAD 83	63	189			
TkS113	Tk 113 External Floating Roof, Standing Loss	592,506	2,356,641	4	NAD 83	47	60			
TkW113	Tk 113 External Floating Roof, Withdrawal Loss	592,506	2,356,641	4	NAD 83	47	60			
TkS114	Tk 114 External Floating Roof, Standing Loss	592,508	2,356,707	4	NAD 83	56	138			
TkW114	Tk 114 External Floating Roof, Withdrawal Loss	592,508	2,356,707	4	NAD 83	56	138			
TkS115	Tk 115 External Floating Roof, Standing Loss	592,496	2,356,585	4	NAD 83	64	175			
TkW115	Tk 115 External Floating Roof, Withdrawal Loss	592,496	2,356,585	4	NAD 83	64	175			
TkS141	Tk 141 External Floating Roof, Standing Loss	592,416	2,356,719	4	NAD 83	64	175			
TkW141	Tk 141 External Floating Roof, Withdrawal Loss	592,416	2,356,719	4	NAD 83	64	175			
TkS142	Tk 142 External Floating Roof, Standing Loss	592,396	2,356,641	4	NAD 83	64	175			
TkW142	Tk 142 External Floating Roof, Withdrawal Loss	592,396	2,356,641	4	NAD 83	64	175			
TkS143	Tk 143 External Floating Roof, Standing Loss	592,423	2,356,565	4	NAD 83	64	175			
TkW143	Tk 143 External Floating Roof, Withdrawal Loss	592,423	2,356,565	4	NAD 83	64	175			
TkS152	Tk 152 Vertical Fixed Roof, Breathing Loss	592,326	2,356,651	4	NAD 83	48	110			
TkW152	Tk 152 Vertical Fixed Roof, Working Loss	592,326	2,356,651	4	NAD 83	48	110			
TkS162	Tk 162 External Floating Roof, Standing Loss	592,185	2,356,658	4	NAD 83	31	33			
TkW162	Tk 162 External Floating Roof, Withdrawal Loss	592,185	2,356,658	4	NAD 83	31	33			
TkS163	Tk 163 External Floating Roof, Standing Loss	592,185	2,356,641	4	NAD 83	32	33.5			
TkW163	Tk 163 External Floating Roof, Withdrawal Loss	592,185	2,356,641	4	NAD 83	32	33.5			
TkS232	Tk 232 External Floating Roof, Standing Loss	592,360	2,356,884	4	NAD 83	48	55			
TkW232	Tk 232 External Floating Roof, Withdrawal Loss	592,360	2,356,884	4	NAD 83	48	55			
TkS233	Tk 233 External Floating Roof, Standing Loss	592,360	2,356,839	4	NAD 83	48	55			
TkW233	Tk 233 External Floating Roof, Withdrawal Loss	592,360	2,356,839	4	NAD 83	48	55			
TkS235	Tk 235 External Floating Roof, Standing Loss	592,316	2,356,838	4	NAD 83	48	55			
TkW235	Tk 235 External Floating Roof, Withdrawal Loss	592,316	2,356,838	4	NAD 83	48	55			
TkS236	Tk 236 External Floating Roof, Standing Loss	592,199	2,356,958	4	NAD 83	48	77			
TkW236	Tk 236 External Floating Roof, Withdrawal Loss	592,199	2,356,958	4	NAD 83	48	77			
TkS237	Tk 237 External Floating Roof, Standing Loss	592,244	2,356,960	4	NAD 83	48	77			
TkW237	Tk 237 External Floating Roof, Withdrawal Loss	592,244	2,356,960	4	NAD 83	48	77			
TkS249	Tk 249 Domed Ext. Floating Roof, Standing Loss	592,358	2,356,959	4	NAD 83	39	42			
TkW249	Tk 249 Domed Ext. Floating Roof, Withdrawal Loss	592,358	2,356,959	4	NAD 83	39	42			
TkS250	Tk 250 Domed External Floating Roof, Standing Loss	592,407	2,356,962	4	NAD 83	32	33.5			
TkW250	Tk 250 Domed External Floating Roof, Withdrawal Loss	592,407	2,356,962	4	NAD 83	32	33.5			
TkS252	Tk 252 External Floating Roof, Standing Loss	592,201	2,356,874	4	NAD 83	48	77			
TkW252	Tk 252 External Floating Roof, Withdrawal Loss	592,201	2,356,874	4	NAD 83	48	77			
TkS253	Tk 253 External Floating Roof, Standing Loss	592,247	2,356,875	4	NAD 83	48	77			
TkW253	Tk 253 External Floating Roof, Withdrawal Loss	592,247	2,356,875	4	NAD 83	48	77			
TkS254	Tk 254 External Floating Roof, Standing Loss	592,316	2,356,883	4	NAD 83	48	72			
TkW254	Tk 254 External Floating Roof, Withdrawal Loss	592,316	2,356,883	4	NAD 83	48	72			
TkS255	Tk 255 External Floating Roof, Standing Loss	592,201	2,356,917	4	NAD 83	48	77			
TkW255	Tk 255 External Floating Roof, Withdrawal Loss	592,201	2,356,917	4	NAD 83	48	77			
TkS256	Tk 256 External Floating Roof, Standing Loss	592,245	2,356,917	4	NAD 83	48	77			
TkW256	Tk 256 External Floating Roof, Withdrawal Loss	592,245	2,356,917	4	NAD 83	48	77			
TkS257	Tk 257 External Floating Roof, Standing Loss	592,157	2,356,958	4	NAD 83	48	67			
TkW257	Tk 257 External Floating Roof, Withdrawal Loss	592,157	2,356,958	4	NAD 83	48	67			
TkS258	Tk 258 External Floating Roof, Standing Loss	592,158	2,356,922	4	NAD 83	48	67			
TkW258	Tk 258 External Floating Roof, Withdrawal Loss	592,158	2,356,922	4	NAD 83	48	67			
TkS262	Tk 262 External Floating Roof, Standing Loss	592,159	2,356,886	4	NAD 83	48	67			
TkW262	Tk 262 External Floating Roof, Withdrawal Loss	592,159	2,356,886	4	NAD 83	48	67			

Emission Unit ID	Emission Unit Description	UTM Easting (m)	UTM Northing (m)	UTM Zone	Datum	Stack height (ft)	Stack Diameter (ft)	Stack Velocity (ft/sec)	Stack Temperature (deg. F)	Stack Flow Rate (ACFS)
TkS263	Tk 263 External Floating Roof, Standing Loss	592,089	2,356,994	4	NAD 83	48	77			
TkW263	Tk 263 External Floating Roof, Withdrawal Loss	592,089	2,356,994	4	NAD 83	48	77			
TkS264	Tk 264 External Floating Roof, Standing Loss	592,091	2,356,956	4	NAD 83	48	77			
TkW264	Tk 264 External Floating Roof, Withdrawal Loss	592,091	2,356,956	4	NAD 83	48	77			
TkS265	Tk 265 External Floating Roof, Standing Loss	592,092	2,356,913	4	NAD 83	48	80			
TkW265	Tk 265 External Floating Roof, Withdrawal Loss	592,092	2,356,913	4	NAD 83	48	80			
TkS266	Tk 266 External Floating Roof, Standing Loss	592,093	2,356,872	4	NAD 83	48	80			
TkW266	Tk 266 External Floating Roof, W ithdrawal Loss	592,093	2,356,872	4	NAD 83	48	80			
TkS267	Tk 267 External Floating Roof, Standing Loss	592,094	2,356,828	4	NAD 83	48	80			
TkW267	Tk 267 External Floating Roof, Withdrawal Loss	592,094	2,356,828	4	NAD 83	48	80			
TkS269	Tk 269 External Floating Roof, Standing Loss	592,050	2,356,913	4	NAD 83	48	60			
TkW269	Tk 269 External Floating Roof, W ithdrawal Loss	592,050	2,356,913	4	NAD 83	48	60			
TkS271	Tk 271 External Floating Roof, Standing Loss	592,052	2,356,828	4	NAD 83	48	77			
TkW271	Tk 271 External Floating Roof, Withdrawal Loss	592,052	2,356,828	4	NAD 83	48	77			
TkS272	Tk 272 Vertical Fixed Roof, Breathing Loss	592,011	2,356,909	4	NAD 83	48	77			
TkW272	Tk 272 Vertical Fixed Roof, Working Loss	592,011	2,356,909	4	NAD 83	48	77			
TkS273	Tk 273 External Floating Roof, Standing Loss	592,159	2,356,852	4	NAD 83	48	55			
TkW273	Tk 273 External Floating Roof, Withdrawal Loss	592,159	2,356,852	4	NAD 83	48	55			
TkS274	Tk 274 Vertical Fixed Roof, Breathing Loss	591,989	2,356,957	4	NAD 83	48	87			
TkW274	Tk 274 Vertical Fixed Roof, Working Loss	591,989	2,356,957	4	NAD 83	48	87			
TkS275	Tk 275 External Floating Roof, Standing Loss	592,019	2,356,941	4	NAD 83	31.5	34			
TkW275	Tk 275 External Floating Roof, W ithdrawal Loss	592,019	2,356,941	4	NAD 83	31.5	34			
M7	Load Rack	592,336	2,357,016	4	NAD 83					

File No.: _____

S-3: Application for a Covered Source Permit Renewal

Each application for permit renewal shall be submitted to the Director of Health, (hereafter, Director) a minimum of **twelve months** prior to the date of permit expiration. In providing the required information, please reference the corresponding letters and numbers listed below.

Provide a minimum of **two (2)** sets (1 original and 1 copy) of all application materials to the Hawaii Department of Health. Also, mail **one (1)** set directly to EPA at the following address:

Chief (Attention: AIR-3)
Permits Office, Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

I. In accordance with Hawaii Administrative Rules (HAR) §11-60.1-101, the following information is required:

A. Statement certifying that no changes have been made in the design or operation of the source as proposed in the initial and any subsequent Covered Source Permit applications. If changes have occurred or are being proposed, the applicant shall provide a description of those changes such as work practices, operations, equipment design, and monitoring procedures, including the affected applicable requirements associated with the changes and the corresponding information to determine the applicability of all applicable requirements.

B. Equipment Specifications:
   1. Maximum design capacity.
   2. Fuel type.
   3. Fuel use.
   4. Production capacity.
   5. Production rates.
   6. Raw materials.
   7. Provide any manufacturer's literature.

C. Provide detailed descriptions of all processes and products defined by Standard Industrial Classification Code (SICC). Also, provide any reasonably anticipated alternative operating scenarios, associated processes, and products, by SICC.
   1. Identify and describe in detail all air pollution control equipment and compliance monitoring devices or activities, and to the extent of available information, an estimate of emissions before and after controls. Provide all calculations and assumptions.
   2. List all ***insignificant*** activities in accordance with HAR §11-60.1-82.

D. Maximum Operating Schedule (to the extent needed to determine or regulate emissions):
   1. Total hours per day, per week, and/or per month.
   2. Total hours per year.
   3. If operation is seasonal or irregular, describe.

E. Cite and describe all applicable requirements as defined in HAR §11-60.1-81, including the following:
   1. Description of or reference to any applicable test methods for determining compliance with each applicable requirement.
   2. Explanation of all proposed exemptions from any applicable requirements.

F. Identify and describe current operational limitations or work practices that affect emissions of any regulated or hazardous air pollutant. Provide all calculations and assumptions.

G. For ***new*** covered sources and ***significant*** modifications which increase the emissions of any air pollutant or result in the emission of any air pollutant not previously emitted, an assessment of the ambient air quality impact of the covered source or significant modification, with the inclusion of any available background air quality data. The assessment shall include all supporting data, calculations and assumptions, and a comparison with the NAAQS and SAAQS.

H. For ***new*** covered sources and ***significant*** modifications subject to the requirements of subchapter 7 of HAR Chapter 11-60.1, all analyses, assessments, monitoring, and other application requirements of subchapter 7.

I. Provide detailed information to define permit terms and conditions for any proposed ***emissions trading*** within the facility in accordance with HAR §11-60.1-96.

J. Provide the following for Compliance purposes:
   1. A Compliance Plan, Form C-1.
   2. A Compliance Certification, Form C-2.

II. Submit an application fee according to the Application Fee Schedule in the Instructions for Applying for an Air Pollution Control Permit.

III. Provide other information as follows:

A. As required by any applicable requirement or as requested and deemed necessary by the Director to make a decision on the application.

B. As may be necessary to implement and enforce other applicable requirements of the Clean Air Act or of HAR Chapter 11-60.1 or to determine the applicability of such requirements.

IV. The Director reserves the right to request the following information:

A. An assessment of the ambient air quality impact of the source or modification. The assessment shall include all supporting data, calculations and assumptions, and a comparison with the National Ambient Air Quality Standards and State Ambient Air Quality Standards.

B. A risk assessment of the air quality related impacts caused by the covered source or significant modification to the surrounding environment.

C. Results of source emissions testing, ambient air quality monitoring, or both.

D. Information on other available control technologies.

V. An application shall be determined to be complete only when all of the following have been complied with:

A. All information required or requested in numbers **I, III, and IV** has been submitted.

B. All documents requiring certification have been certified pursuant to HAR §11-60.1-4.

C. All applicable fees have been submitted.

D. The Director has certified that the application is complete.

VI. The Director shall not continue to act upon or consider an incomplete application.

A. The applicant shall be notified in writing whether the application is complete. Unless the Director requests additional information or notifies the applicant of incompleteness within sixty days of receipt of an application, the application shall be deemed complete.

B. During the processing of an application that has been determined or deemed complete, if the Director determines that additional information is necessary to evaluate or take final action on the application, the Director may request such information in writing and set a reasonable deadline for a response. As set forth in HAR §11-60.1-82, the covered source's ability to operate and the validity of the Covered Source Permit shall continue beyond the permit expiration date until the final permit is issued or denied, provided the applicant submits all additional information within the reasonable deadline specified by the Director.

VII. After receipt of a complete application, the Director, in writing, shall approve, conditionally approve, or deny an application:

A. Within twelve months, ***except*** for applications for renewal for coverage under a covered source general permit. If the application for renewal has not been approved or denied within twelve months, the Covered Source Permit and all its terms and conditions shall remain in effect and not expire until the application for renewal has been approved or denied and provided the applicant has submitted any additional information within the reasonable deadline specified by the Director.

B. Within six months for applications for renewal requesting coverage under a covered source general permit. If the application for renewal has not been approved or denied within six months, the coverage under the covered source general permit and all its terms and conditions shall remain

in effect and not expire until the application for renewal has been approved or denied and provided the applicant has submitted any additional information within the reasonable deadline specified by the Director.

VIII. A Covered Source Permit renewal application shall be approved only if the Director determines that the operation of the covered source will be in compliance with all applicable requirements.

IX. The Director shall provide for public notice, including the method by which a public hearing can be requested, and an opportunity for public comment on the draft Covered Source Permit renewal in accordance with HAR §11-60.1-99.

X. The Director shall provide a statement that sets forth the legal and factual bases for the draft permit conditions (including references to the applicable statutory or regulatory provisions) to EPA and any other person requesting it.

XI. Each application for renewal and proposed Covered Source Permit shall be subject to EPA oversight in accordance with HAR §11-60.1-95.

File No.: _____

S-7: Application for a Minor Modification to a Covered Source

In providing the required information, reference the corresponding letters and numbers listed below.

Provide a minimum of **two (2)** sets (1 original and 1 copy) of all application materials to the Hawaii Department of Health. Also, mail **one (1)** set directly to EPA at the following address:

Chief (Attention: AIR-3)
Permits Office, Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

I. In accordance with Hawaii Administrative Rules (HAR) §11-60.1-103, the following information is required:

A. A clear description of all changes.

B. A statement of why the modification is determined to be minor, and a request that minor modification procedures be used.

C. Cite and describe any new applicable requirements as defined in HAR §11-60.1-81 that will apply if the minor modification occurs.

D. The suggested changes to permit terms or conditions.

E. Certification by a responsible official that the proposed modification meets the criteria for minor modification.

F. All information submitted with the application for the Initial Covered Source Permit or any subsequent application for a Covered Source Permit. The owner or operator may reference information contained in a previous application submittal, provided such referenced information has been certified as being current and still applicable.

G. Other information, as required by any applicable requirement or as requested and deemed necessary by the Director of Health (hereafter, Director) to make a decision on the application.

II. Submit an application fee according to the Application Fee Schedule in the Instructions for Applying for an Air Pollution Control Permit.

III. An application shall be determined to be complete only when all of the following have been complied with:

A. All information required or requested in number **I** have been submitted.

B. All documents requiring certification have been certified pursuant to HAR §11-60.1-4.

C. All applicable fees have been submitted.

D. The Director has certified that the application is complete.

IV. The Director shall not continue to act upon or consider an incomplete application.

A. The applicant shall be notified in writing whether the application is complete. Unless the Director requests additional information or notifies the applicant of incompleteness within thirty days of receipt of an application, the application shall be deemed complete.

B. During the processing of an application that has been determined or deemed complete, if the Director determines that additional information is necessary to evaluate or take final action on the application, the Director may request such information in writing and set a reasonable deadline for a response.

V. Within ninety days of receipt of a complete application for a minor modification, or upon program approval, within fifteen days after the end of the Administrator's forty-five-day review period, whichever is later, the Director in writing shall:

A. Amend the permit to reflect the minor modification as proposed.

B. Deny the minor modification.

C. Determine that the requested modification does not meet the minor modification criteria, and should be reviewed under the significant modification procedures; or

D. Upon program approval, amend the proposed permit and resubmit the amendment to EPA for reevaluation.

VI. An application for a minor modification to a covered source shall be approved only if the Director determines that the minor modification will be in compliance with all applicable requirements.

VII. The Director shall provide a statement that sets forth the legal and factual bases for the proposed permit conditions (including references to the applicable statutory or regulatory provisions) to EPA and any other person requesting it.

VIII. Each application and proposed permit reflecting the minor modification to a covered source shall be subject to EPA oversight in accordance with HAR §11-60.1-95.

File No.: _____

C-1: Compliance Plan

The Responsible Official shall submit a Compliance Plan as indicated in the Instructions for Applying for an Air Pollution Control Permit and at such other times as requested by the Director of Health (hereafter, Director).

Use separate sheets of paper if necessary.

---

1. Compliance status with respect to all Applicable Requirements:

   Will your facility be in compliance, or is your facility in compliance, with all applicable requirements in effect at the time of your permit application submittal?

   [X] YES {If YES, complete items a and c below}

   [ ] NO {If NO, complete items a, b, and c below}

   a. Identify all applicable requirement(s) for which compliance is achieved.

   The Kapolei Terminal is in compliance with all applicable requirements within CSP 0863-01-C

   Provide a statement that the source is in compliance and will continue to comply with all such requirements.

   The Kapolei Terminal is in compliance and will continue to comply with all such requirements.

   b. Identify all applicable requirement(s) for which compliance is NOT achieved.

   Not applicable

   Provide a detailed Schedule of Compliance Schedule and a description of how the source will achieve compliance with all such applicable requirements.

Description of Remedial Action	Expected Date of Completion

c. Identify any other applicable requirement(s) with a future compliance date that your source is subject to. These applicable requirements may take effect AFTER permit issuance:

Applicable Requirement	Effective Date	Currently in Compliance?
Not applicable		

If the source is not currently in compliance, provide a Schedule of Compliance and a description of how the source will achieve compliance with all such applicable requirements:

Description of Proposed Action/Steps to Achieve Compliance	Expected Date of Achieving Compliance
Not applicable	

Provide a statement that the source on a timely basis will meet all these applicable requirements:

Not applicable

If the expected date of achieving compliance will NOT meet the applicable requirement's effective date, provide a more detailed description of each remedial action and the expected date of completion:

Description of Remedial Action and Explanation	Expected Date of Completion

2. Compliance Progress Reports:

a. If a compliance plan is being submitted to remedy a violation, complete the following information:

Frequency of Submittal: Not applicable (less than or equal to 6 months) Beginning Date: _____

b. Date(s) that the Action described in (1)(b) was achieved:

Remedial Action	Date Achieved

c. Narrative description of why any date(s) in (1)(b) was not met, and any preventive or corrective measures taken in the interim:

RESPONSIBLE OFFICIAL (as defined in HAR §11-60.1-1)

Name (Last): Dangler (First): Mark (MI): ____

Title: Vice President - Logistics Phone: (808) 682-5711

Mailing Address: 91-480 Malakole St.

City: Kapolei State: HI Zip Code: 96707

Certification by Responsible Official (pursuant to HAR §11-60.1-4)

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Name (Print/Type): MARK DANGLER

(Signature): Mark Dgl Date: 11/10/2022

Facility Name: IES Downstream, LLC - Kapolei Terminal

Location: 91-480 Malakole St.

Permit Number: 0863-01-C

FOR AGENCY USE ONLY

File/Application No.: ____

Island: ____

Date Received: ____

File No.: _____

C-2: Compliance Certification

The Responsible Official shall submit a Compliance Certification as indicated in the Instructions for Applying for an Air Pollution Control Permit and at such other times as requested by the Director of Health (hereafter, Director).

Complete as many copies of this form as needed. Use separate sheets of paper if necessary.

RESPONSIBLE OFFICIAL (as defined in HAR §11-60.1-1)

Name (Last): Dangler (First): Mark (MI): _____

Title: Vice President - Logistics Phone: (808) 682-5711

Mailing Address: 91-480 Malakole St.

City: Kapolei State: HI Zip Code: 96707

Certification by Responsible Official (pursuant to HAR §11-60.1-4)

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Name (Print/Type): MARK DANGLER

(Signature): Mark Dgl Date: 11/20/2022

Facility Name: IES Downstream, LLC - Kapolei Terminal

Location: 91-480 Malakole St., Kapolei, HI 96707

Permit Number: 0863-01-C

FOR AGENCY USE ONLY
File/Application No.: _____
Island: _____
Date Received: _____

Complete the following information for ***each*** applicable requirement that applies to ***each*** emissions unit at the source. Also include any additional information as required by the Director. The compliance certification may reference information contained in a previous compliance certification submittal to the Director, provided such referenced information is certified as being current and still applicable.

1. Schedule for submission of Compliance Certifications during the term of the permit:

   Frequency of Submittal: Annually, as noted in Appendix D Beginning Date: 60 days after the end of each calendar year

2. Emissions Unit No./Description: All emission units onsite (storage tanks, loading rack, insig. activities)

3. Identify the applicable requirement(s) that is/are the basis of this certification:

   See Appendix D

4. Compliance status:

   a. Will the emissions unit be in compliance with the identified applicable requirement(s)?

      [X] YES [ ] NO

   b. If YES, will compliance be continuous or intermittent?

      [X] Continuous [ ] Intermittent

   c. If NO, explain:

5. Describe the methods to be used in determining compliance of the emissions unit with the applicable requirement(s), including any monitoring, recordkeeping, reporting requirements, and/or test methods:

See Appendix D

Provide a detailed description of the methods used to determine compliance (e.g. monitoring device type and location, test method description, or parameter being recorded, frequency of recordkeeping, etc.):

See Appendix D

6. Statement of Compliance with Enhanced Monitoring and Compliance Certification Requirements.

a. Will the emissions unit identified in this application be in compliance with applicable enhanced monitoring and compliance certification requirements? Not applicable

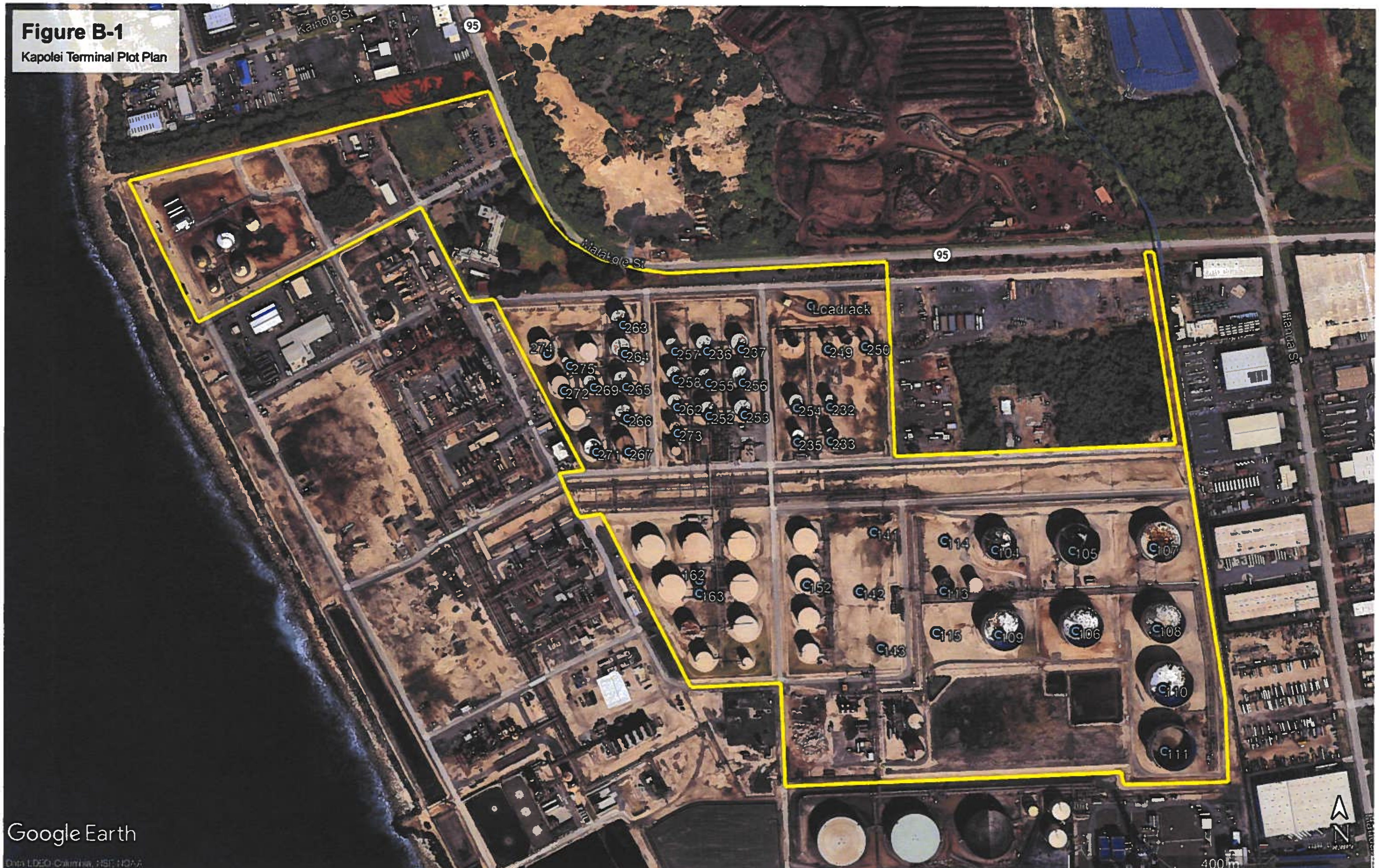
☐ YES ☐ NO

b. If YES, identify the requirements and the provisions being taken to achieve compliance:

c. If NO, describe below which requirements will not be met:

APPENDIX B. PLOT PLAN

Figure B-1
Kapolei Terminal Plot Plan



APPENDIX C. POTENTIAL TO EMIT EMISSION CALCULATIONS

Criteria Summary

SOURCES	Pollutant emission rates (ton/yr)						Total Criteria Pollutant Emissions
	PM10	SO2	CO	NO2	VOC	Lead	
Loading Rack	-	-	-	-	210.7	0.0	211
Tanks	-	-	-	-	121.6	0.0	122
Process Fugitives	-	-	-	-	4.1	0.0	4
Total Emissions	**0.0**	**0.0**	**0.0**	**0.0**	**336.4**	**0.0**	**336.4**

IES DOWNSTREAM, LLC - KAPOLEI TERMINAL
SPECIATED HAP SUMMARY

	Total speciated VOC emissions										
Fugitive Emission by Area NUMBER	**AREA DESCRIPTION**	BENZENE CAS# 71432 (ton/yr) 1	NAPHTHALENE CAS# 91203 (ton/yr) 2	O-XYLENE CAS# 95476 (ton/yr) 3	ETHYLBENZENE CAS# 100414 (ton/yr) 4	P-XYLENE CAS# 106423 (ton/yr) 5	ETHYLENE DIBROMIDE CAS# 106934 (ton/yr) 6	ETHYLENE DICHLORIDE CAS# 107062 (ton/yr) 7	M-XYLENE CAS# 108383 (ton/yr) 8	TOLUENE CAS# 108883 (ton/yr) 9	1,3-BUTADIENE CAS# 106990 (ton/yr) 10
20	LPG AREA AND FIELD PIPING BLENDING AND SHIPPING	0.08	0.14	0.05	0.08	0.04	0.00	0.00	0.08	0.36	0.00
	TANKS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LOAD RACK	0.80	0.19	0.75	0.64	1.85	0.00	0.00	0.00	15.74	0.00
	HAPs Summary	**0.89**	**0.33**	**0.80**	**0.72**	**1.88**	**0.00**	**0.00**	**0.08**	**16.10**	**0.00**

IES DOWNSTREAM, LLC - KAPOLEI TERMINAL
SPECIATED HAP SUMMARY

Total speciated VOC emissions

Fugitive Emission by Area NUMBER	**AREA DESCRIPTION**	n-HEXANE CAS# 110543 (ton/yr) 11	ANILINE CAS# 62533 (ton/yr) 12	CRESOL MIXTURE CAS# 1319773 (ton/yr) 13	PHENOL CAS# 108952 (ton/yr) 14	STYRENE CAS# 100425 (ton/yr) 15	METHANOL CAS# 67561 (ton/yr) 16	NICKEL CAS# (ton/yr) 17	*reported as* LEAD CAS# (ton/yr) 18	HCL CAS# 7647010 (ton/yr) 19	PERCHLOROETHYLENE CAS# 127184 (ton/yr) 20
20	LPG AREA AND FIELD PIPING BLENDING AND SHIPPING	0.14	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TANKS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LOAD RACK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HAPs Summary	**0.14**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

IES DOWNSTREAM, LLC - KAPOLEI TERMINAL
SPECIATED HAP SUMMARY

Total speciated VOC emissions

Fugitive Emisision by Area NUMBER	**AREA DESCRIPTION**	*not HAP* CYCLOHEXANE CAS# 110827 (ton/yr) 21	BIPHENYL CAS# 92524 (ton/yr) 22	2,2,4 TRIMETHYLPENTANE CAS# 540841 (ton/yr) 23	CUMENE CAS# 98828 (ton/yr) 24	O-TOLUIDINE CAS# 95534 (ton/yr) 25	ACRYLAMIDE CAS# 79061 (ton/yr) 26	ANTIMONY COMPOUNDS CAS# (ton/yr) 27	ARSENIC CAS# (ton/yr) 28	*not HAP* PROPYLENE CAS# 115071 (ton/yr) 29	CYANIDE COMPOUNDS CAS# (ton/yr) 30
20	LPG AREA AND FIELD PIPING BLENDING AND SHIPPING	0.08	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.25	0.00
	TANKS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LOAD RACK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	HAPs Summary	**0.08**	**0.00**	**0.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.25**	**0.00**

IES DOWNSTREAM, LLC - KAPOLEI TERMINAL
SPECIATED HAP SUMMARY

	Total speciated VOC emissions						
Fugitive Emission by Area NUMBER	**AREA DESCRIPTION**	*not HAP* 1,2,4-TMBenzene CAS# 95636 (ton/yr) 31	*not HAP* ETHYLENE CAS# 74851 (ton/yr) 32	Formaldehyde (ton/yr)	POM/PAH (ton/yr)		Total Haps ton/yr
20	LPG AREA AND FIELD PIPING BLENDING AND SHIPPING	0.08	0.05				1.125
	TANKS	0.00	0.00	0.00	0.00		2.793
	LOAD RACK	2.59	0.00	0.00	0.00	0.00	19.963
	HAPs Summary	**2.67**	**0.05**	**0.00**	**0.00**	**0.00**	**23.88**

0

TERMINAL STORAGE TANKS POTENTIAL EMISSIONS

	Tank Physical Data					PTE Calculations			TOTAL VOC PTE	
Tank	Diameter (ft)	Height (ft)	Volume (gal)	Volume (bbl)	Safe Fill Vol (bbl)	Stock	Throughput (gal)	TankESP Stock	(ton/yr)	
KAP104	138	55.5	6,209,300	147,840	129,811	Jet	17465673.64	JET-A	0.17	
KAP105	176	63.5	11,555,548	275,132	228,196	Crude	61512073.38	TAPIS	1.33	
KAP106	176	63.5	11,555,548	275,132	234,221	Crude	63136160.75	TAPIS	1.34	
KAP107	176	63.3	11,519,152	274,266	238,000	Jet	78263481.03	JET-A	0.08	
KAP108	176	55.7	10,136,126	241,336	204,851	Crude	55219240.23	TAPIS	1.32	
KAP109	176	63.4	11,537,350	274,699	221,147	Crude	59611958.54	TAPIS	1.33	
KAP110	189	63.4	13,304,677	316,778	267,979	Crude	72235902.09	TAPIS	1.41	
KAP111	189	63	13,220,736	314,779	268,322	Gasoline	41002589.89	RUL	8.77	
KAP113	60	47	994,012	23,667	16,737	Oily Water	1988024.96	OILYWATER	7.93	
KAP151	110	48	3,412,071	81,240	73,510	LSFO	14154259.26	LSFO	1.77	
KAP152	110	48	3,412,071	81,240	73,037	LSFO	14063007.69	LSFO	1.76	
KAP153	95	48	2,544,954	60,594	54,331	LSFO	10461299.82	LSFO	1.29	
KAP154	77	48	1,671,915	39,807	34,602	OUT	0.00	OUT	0.00	
KAP155	122	48	4,197,130	99,932	92,353	Jet	30369151.65	JET-A	2.40	
KAP156	122	48	4,197,130	99,932	89,878	Jet	29555279.14	JET-A	1.60	
KAP157	106	48	3,168,432	75,439	70,072	Jet	23042195.99	JET-A	1.79	
KAP158	122	48	4,197,130	99,932	92,176	Jet	30311010.24	JET-A	2.39	
KAP160	122	48	4,197,130	99,932	93,158	Jet	30633904.90	JET-A	1.63	
KAP161	122	48	4,197,130	99,932	92,362	Jet	30372149.73	JET-A	2.40	
KAP162	33	31	198,327	4,722	3,403	Recovered Oil	396653.28	REC-OIL	0.01	
KAP163	33.5	32	210,975	5,023	3,152	Recovered Oil	421950.07	REC-OIL	0.01	
KAP165	77	48	1,671,915	39,807	36,466	LSFO	7021440.22	LSFO	0.84	
KAP166	42.5	40	424,453	10,106	8837	LSFO	1701543.01	LSFO	0.20	
KAP232	55	48	853,018	20,310	16402	Gasoline	3221539.04	WSR	4.79	
KAP233	55	48	853,018	20,310	15839	Gasoline	3111012.65	WSR	4.79	
KAP235	55	48	853,018	20,310	16352	Transmix	1706035.61	TRANSMIX	0.57	
KAP236	77	48	1,671,915	39,807	31362	Gasoline	4792387.07	RUL	4.64	
KAP237	77	48	1,671,915	39,807	31119	Gasoline	4755336.75	RUL	4.64	
KAP249	42	39	404,161	9,623	7051	Jet	2318701.46	JET-A	0.01	
KAP250	33.5	32	210,975	5,023	3146	Jet	1034441.10	JET-A	0.01	
KAP252	77	48	1,671,915	39,807	31497	Gasoline	5271333.78	PUL	4.84	
KAP253	77	48	1,671,915	39,807	31534	Gasoline	5277559.80	PUL	4.84	
KAP254	72	48	1,461,833	34,806	37742	Gasoline	7413132.57	WSR	5.54	
KAP255	77	48	1,671,915	39,807	25020	Gasoline	4187416.51	PUL	4.90	
KAP256	77	48	1,671,915	39,807	31671	Gasoline	4839708.98	RUL	4.64	
KAP257	67	48	1,265,850	30,139	23615	Gasoline	3952178.24	PUL	4.54	
KAP258	67	48	1,265,850	30,139	24317	Gasoline	4069766.60	PUL	4.54	
KAP262	67	48	1,265,850	30,139	21100	Gasoline	3531293.25	PUL	4.54	
KAP263	77	48	1,671,915	39,807	31865	Jet	10478427.83	JET-A	0.10	
KAP264	77	48	1,671,915	39,807	34225	Jet	11254485.87	JET-A	0.10	
KAP265	80	48	1,804,732	42,970	33538	Jet	11028673.37	JET-A	0.09	
KAP266	80	48	1,804,732	42,970	33517	Gasoline	5121797.07	RUL	4.73	
KAP267	80	48	1,804,732	42,970	33963	Jet	11168361.11	JET-A	0.11	
KAP268	77	48	1,671,915	39,807	35317	DIESEL	19598909.24	DIESEL	0.10	
KAP269	60	48	1,015,162	24,171	18042	Naphtha	3543737.42	WSR	4.97	
KAP270	77	48	1,671,915	39,807	36539	DIESEL	30661076.44	DIESEL	0.12	
KAP271	77	48	1,671,915	39,807	31796	Naphtha	6245243.05	WSR	4.81	
KAP272	77	48	1,671,915	39,807	36836	DIESEL	20883460.57	DIESEL	0.66	
KAP273	55	48	853,018	20,310	16006	Gasoline	2678762.07	PUL	4.06	
KAP274	87	48	2,134,377	50,819	44329	Jet	14577066.60	JET-A	0.78	
KAP275	34	31.5	213,924	5,093	3955	Gasoline	776825.27	WSR	1.24	
KAP115	175	64	11550000	275000	238000	Jet	32022173.20	JET-A	0.04	
KAP141	175	64	11550000	275000	238000	Jet	32022173.20	JET-A	0.04	
KAP142	175	64	11550000	275000	238000	Jet	32022173.20	JET-A	0.04	
KAP143	175	64	11550000	275000	238000	Jet	32022173.20	JET-A	0.04	
KAP114	138	56	5670000	135000	120000	Military Jet	16145633.55	JET-A	0.02	
									121.60	**Total VOC (tpy)**

STOCK THROUGHPUT ACTUALS AND POTENTIALS

	RY2021 (gal)	RY2019 (gal)	2022 est. (gal)	**PTE basis (gal)**
TAPIS	153,585,894	528,790,607	249,372,268	**311,715,335**
JET-A	213,749,216	150,331,534	251,525,864	**314,407,330**
RUL	48,409,456	105,278,360	27,982,261	**60,511,820**
OILY WATER	0	1,532,179	1,532,179	**1,915,224**
HSFO	5,277,877	79,727,796		**0**
LSFO	16,851,335	186,467,690	37,921,240	**47,401,550**
OUT	0			**0**
OFFTEST	0	2,365,597	2,365,597	**2,956,996**
WSR	19,417,252	96,978,593	19,449,192	**24,311,490**
WATER	0	0		**0**
PUL	23,174,648	39,948,125	12,885,684	**28,968,310**
DIESEL	56,914,757	78,616,752	45,352,328	**71,143,446**

Input ratios for developing potential throughputs

1.25 Diesel PTE throughput ratio to 2019 actual
1.25 Fuel oil PTE throughput ratio to 2021 actual
1.25 Existing tanks Jet ratio to facility-wide 2021 actual
1.25 All other stocks ratio to 2019 actual

NEW JET TANKS FOR 2022 CSP RENEWAL

	Safe Fill Vol (bbl)	Throughput (gal/year)
KAP115	238,000	32,022,173
KAP141	238,000	32,022,173
KAP142	238,000	32,022,173
KAP143	238,000	32,022,173
KAP114	120,000	16,145,634
KAP104	129,811	17,465,674
Total	1,201,811	161,700,000

Militarty Contract:	**3,500,000**	**bbls/year**	Fixed for 5 years
Safety Factor	1.1		
Total for PTE	3,850,000	BBLs/year	only applicable to 6 tanks

TankSummaries for 2023 Annual

Site: Kapolei, Kapolei terminal

Equations for this site: After 2019 AP-42 revisions H/D ratio: calculated

Load Rack Species	Tank ID	Tank Diameter (ft)	Tank Type	Product	RVP	Throughput in gal.	Bulk Liquid Temperature (degF)	Avg. Liquid Surface Temp. (degF)	Avg. TVP (psia)	Includes a landing loss?	Initial fill?
Jet Fuel	KAP104	138	EFRT	Jet kerosene		17465674	84.084197	87.223624	0.019369177	N	N
	KAP105	176	EFRT	Crude - Maximum of all groups	4.4	61512073	84.354477	87.304708	4.0794652	N	N
	KAP106	176	EFRT	Crude - Maximum of all groups	4.4	63136161	84.354477	87.304708	4.0794652	N	N
Jet Fuel	KAP107	176	EFRT	Jet kerosene		78263481	84.362354	87.307071	0.019417503	N	N
	KAP108	176	EFRT	Crude - Maximum of all groups	4.4	55219240	84.68202	87.402971	4.0867853	N	N
	KAP109	176	EFRT	Crude - Maximum of all groups	4.4	59611959	84.358412	87.305888	4.0795531	N	N
	KAP110	189	EFRT	Crude - Maximum of all groups	4.4	72235902	84.536501	87.359315	4.0835319	N	N
Motor Gasoline	KAP111	189	EFRT	Gasoline R U/L	8.73	41002590	84.552325	87.364062	7.450745	N	N
	KAP113	60	EFRT	Oily Water		1988025	82.534935	86.758845	3.4000835	N	N
Jet Fuel	KAP114	138	cone-roof tank with IFR	Jet kerosene		16145634	79.627285	82.818801	0.016963363	N	N
Jet Fuel	KAP115	175	cone-roof tank with IFR	Jet kerosene		32022173	79.627285	82.89955	0.017004986	N	N
Jet Fuel	KAP141	175	cone-roof tank with IFR	Jet kerosene		32022173	79.627285	82.89955	0.017004986	N	N
Jet Fuel	KAP142	175	cone-roof tank with IFR	Jet kerosene		32022173	79.627285	82.89955	0.017004986	N	N
Jet Fuel	KAP143	175	cone-roof tank with IFR	Jet kerosene		32022173	79.627285	82.89955	0.017004986	N	N
Diesel	KAP151	110	FRT (no floating roof)	Light Straight Fuel Oil	0.034	14154259	79.627285	83.034487	0.019865594	N	N
Diesel	KAP152	110	FRT (no floating roof)	Light Straight Fuel Oil	0.034	14063008	79.627285	83.034487	0.019865594	N	N
Diesel	KAP153	95	FRT (no floating roof)	Light Straight Fuel Oil	0.034	10461300	79.627285	82.907733	0.019785087	N	N
	KAP154	77	FRT (no floating roof)	Out of Service		0	0	0	0	N	N
Jet Fuel	KAP155	122	FRT (no floating roof)	Jet kerosene		30369152	79.627285	83.120472	0.017119321	N	N
Jet Fuel	KAP156	122	FRT (no floating roof)	Jet kerosene		29555279	79.627285	83.120472	0.017119321	N	N
Jet Fuel	KAP157	106	FRT (no floating roof)	Jet kerosene		23042196	79.627285	83.002987	0.017058435	N	N
Jet Fuel	KAP158	122	FRT (no floating roof)	Jet kerosene		30311010	79.627285	83.120472	0.017119321	N	N
Jet Fuel	KAP160	122	FRT (no floating roof)	Jet kerosene		30633905	79.627285	83.120472	0.017119321	N	N
Jet Fuel	KAP161	122	FRT (no floating roof)	Jet kerosene		30372150	79.627285	83.120472	0.017119321	N	N
	KAP162	33	EFRT	Recovered Oil (as Kerosene)		396653.28	82.167948	86.648749	0.019039107	N	N
	KAP163	33.5	EFRT	Recovered Oil (as Kerosene)		421950.07	82.135681	86.639069	0.019033591	N	N
Diesel	KAP165	77	FRT (no floating roof)	Light Straight Fuel Oil	0.034	7021440.2	79.627285	82.717769	0.019664973	N	N
Diesel	KAP166	42.5	FRT (no floating roof)	Light Straight Fuel Oil	0.034	1701543	79.627285	82.330095	0.019421849	N	N
Motor Gasoline	KAP232	55	EFRT	Whole Straight Run Naphtha	9.98	3221539	82.313118	86.6923	8.4670159	N	N
Motor Gasoline	KAP233	55	EFRT	Whole Straight Run Naphtha	9.98	3111012.8	82.313118	86.6923	8.4670159	N	N
	KAP235	55	EFRT	Transmix	1.8	1706035.6	82.313118	86.6923	1.4134499	N	N
Motor Gasoline	KAP236	77	EFRT	Gasoline R U/L	8.73	4792387.1	83.035079	86.908888	7.3904491	N	N
Motor Gasoline	KAP237	77	EFRT	Gasoline R U/L	8.73	4755336.8	83.035079	86.908888	7.3904491	N	N
Jet Fuel	KAP249	42	domed IFRT	Jet kerosene		2318701.5	79.627285	82.104999	0.016599302	N	N
Jet Fuel	KAP250	33.5	domed IFRT	Jet kerosene		1034441.1	79.627285	82.079882	0.016586617	N	N
Motor Gasoline	KAP252	77	EFRT	Gasoline P U/L	9.05	5271333.8	83.035079	86.908888	7.6736648	N	N
Motor Gasoline	KAP253	77	EFRT	Gasoline P U/L	9.05	5277559.8	83.035079	86.908888	7.6736648	N	N
Motor Gasoline	KAP254	72	EFRT	Whole Straight Run Naphtha	9.98	7413132.6	82.883961	86.863553	8.492493	N	N
Motor Gasoline	KAP255	77	EFRT	Gasoline P U/L	9.05	4187416.5	83.035079	86.908888	7.6736648	N	N
Motor Gasoline	KAP256	77	EFRT	Gasoline R U/L	8.73	4839709	83.035079	86.908888	7.3904491	N	N
Motor Gasoline	KAP257	67	EFRT	Gasoline P U/L	9.05	3952178.2	82.725653	86.816061	7.6610098	N	N
Motor Gasoline	KAP258	67	EFRT	Gasoline P U/L	9.05	4069766.6	82.725653	86.816061	7.6610098	N	N
Motor Gasoline	KAP262	67	EFRT	Gasoline P U/L	9.05	3531293.2	82.725653	86.816061	7.6610098	N	N
Jet Fuel	KAP263	77	EFRT	Jet kerosene		10478428	83.035079	86.908888	0.019187852	N	N
Jet Fuel	KAP264	77	EFRT	Jet kerosene		11254486	83.035079	86.908888	0.019187852	N	N
Jet Fuel	KAP265	80	EFRT	Jet kerosene		11028673	83.122499	86.935114	0.019202904	N	N
Motor Gasoline	KAP266	80	EFRT	Gasoline R U/L	8.73	5121797.1	83.122499	86.935114	7.3939126	N	N
Jet Fuel	KAP267	80	EFRT	Jet kerosene		11168361	83.122499	86.935114	0.019202904	N	N
Diesel	KAP268	77	EFRT	Distillate Fuel Oil No 2		19598909	83.035079	86.908888	0.015072109	N	N
Motor Gasoline	KAP269	60	EFRT	Whole Straight Run Naphtha	9.98	3543737.4	82.49093	86.745644	8.4749453	N	N
Diesel	KAP270	77	EFRT	Distillate Fuel Oil No 2		30661076	83.035079	86.908888	0.015072109	N	N
Motor Gasoline	KAP271	77	EFRT	Whole Straight Run Naphtha	9.98	6245243	83.035079	86.908888	8.4992477	N	N
Diesel	KAP272	77	FRT (no floating roof)	Distillate Fuel Oil No 2		20883461	79.627285	82.717769	0.013288843	N	N
Motor Gasoline	KAP273	55	EFRT	Gasoline P U/L	9.05	2678762.1	82.313118	86.6923	7.6441635	N	N
Jet Fuel	KAP274	87	FRT (no floating roof)	Jet kerosene		14577067	79.627285	82.829226	0.016968732	N	N
Motor Gasoline	KAP275	34	domed EFRT	Whole Straight Run Naphtha	9.98	776825.27	79.627285	82.107011	7.8070507	N	N

Includes a tank cleaning?	Number of Days	Estimated standing losses (lbs)	Estimated working losses (lbs)	Routine Emissions (lbs)	Non Routine Emissions (lbs)	Total estimated emissions (lbs)	Sum of total loss components in the "HAP" set (lbs)
N	365	302.27588	28.345333	330.62121	0	330.62121	34.24783134
N	365	2334.4242	333.34551	2667.7697	0	2667.7697	51.20016154
N	365	2334.4242	342.14674	2676.571	0	2676.571	51.45648062
N	365	61.83167	99.591391	161.42306	0	161.42306	7.549205602
N	365	2339.3544	299.24346	2638.5978	0	2638.5978	50.32701387
N	365	2334.4834	323.04843	2657.5318	0	2657.5318	50.90171869
N	365	2459.9815	364.53414	2824.5156	0	2824.5156	54.35904963
N	365	17493.769	43.180794	17536.949	0	17536.949	116.6811219
N	365	15846.157	9.261948	15855.419	0	15855.419	0
N	365	7.2213518	26.203018	33.42437	0	33.42437	0.968041585
N	365	39.91619	40.98152	80.89771	0	80.89771	4.748337022
N	365	39.91619	40.98152	80.89771	0	80.89771	4.748337022
N	365	39.91619	40.98152	80.89771	0	80.89771	4.748337022
N	365	39.91619	40.98152	80.89771	0	80.89771	4.748337022
N	365	2314.4407	1218.5511	3532.9918	0	3532.9918	41.39332739
N	365	2314.4407	1210.6952	3525.1359	0	3525.1359	41.30128569
N	365	1688.5338	897.38813	2585.9219	0	2585.9219	30.30872156
N	365	0	0	0	0	0	0
N	365	3250.2436	1541.0874	4791.331	0	4791.331	541.3783531
N	365	1702.5256	1499.7873	3202.3129	0	3202.3129	361.8332589
N	365	2410.5082	1165.6226	3576.1308	0	3576.1308	404.0935992
N	365	3250.2436	1538.137	4788.3806	0	4788.3806	541.0449843
N	365	1702.5256	1554.5224	3257.048	0	3257.048	368.0178375
N	365	3250.2436	1541.2396	4791.4831	0	4791.4831	541.3955433
N	365	22.832989	2.833667	25.666656	0	25.666656	111.6988931
N	365	22.927176	2.9693949	25.896571	0	25.896571	112.1745811
N	365	1074.7031	599.07149	1673.7746	0	1673.7746	19.62889459
N	365	257.59922	143.58542	401.18464	0	401.18464	4.710282703
N	365	9576.5182	11.421757	9587.9399	0	9587.9399	95.51151384
N	365	9576.5182	11.029893	9587.548	0	9587.548	95.501247
N	365	1128.0154	5.8501512	1133.8656	0	1133.8656	59.93436395
N	365	9267.1535	12.388032	9279.5416	0	9279.5416	61.04661026
N	365	9267.1535	12.292259	9279.4458	0	9279.4458	61.04205147
N	365	10.623303	12.364338	22.987641	0	22.987641	1.272612844
N	365	8.7451529	6.9157019	15.660855	0	15.660855	1.028708441
N	365	9658.8983	12.980513	9671.8788	0	9671.8788	142.3610606
N	365	9658.8983	12.995844	9671.8941	0	9671.8941	142.3626688
N	365	11064.754	20.077124	11084.831	0	11084.831	110.6694845
N	365	9780.0414	10.311397	9790.3528	0	9790.3528	143.8495019
N	365	9267.1535	12.510356	9279.6639	0	9279.6639	61.05243289
N	365	9060.4742	11.184685	9071.6589	0	9071.6589	133.3204819
N	365	9060.4742	11.517461	9071.9916	0	9071.9916	133.35539
N	365	9060.4742	9.9935787	9070.4678	0	9070.4678	133.1955348
N	365	173.63046	30.477596	204.10805	0	204.10805	19.75799901
N	365	173.63046	32.734841	206.3653	0	206.3653	19.77109103
N	365	141.68893	30.875116	172.56404	0	172.56404	16.15786185
N	365	9437.3818	12.743054	9450.1248	0	9450.1248	62.18895285
N	365	179.80331	31.266176	211.06949	0	211.06949	20.45843081
N	365	136.36808	60.862976	197.23105	0	197.23105	0.243601457
N	365	9929.7496	11.517083	9941.2666	0	9941.2666	99.06360179
N	365	135.36224	95.215726	230.57796	0	230.57796	0.315223703
N	365	9605.1411	15.815788	9620.9569	0	9620.9569	96.05917841
N	365	498.70719	822.1514	1320.8586	0	1320.8586	1.030743839
N	365	8102.481	9.2349279	8111.7159	0	8111.7159	119.0047905
N	365	823.108	733.99131	1557.0993	0	1557.0993	175.9624386
N	365	2473.9578	4.4552969	2478.4131	0	2478.4131	23.90855323

Acetaldehyde	Anthracene	Benzene	Benzo(g,h,i)perylene	Biphenyl	Butadiene (1,3)	Carbon disulfide	Carbonyl sulfide	Chrysene	Cresol	Cresol (m-)	Cresol (o-)	Cresol (p-)	Cumene (isopropylbenzene)
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	15.92196174	2.66676E-05	0.134141386	no data	no data	no data	no data	no data	no data	0.487593839	no data	0.060213596
no data	no data	15.94759974	2.73717E-05	0.13766188	no data	no data	no data	no data	no data	no data	0.499915569	no data	0.061093719
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	15.86338537	2.39395E-05	0.120504532	no data	no data	no data	no data	no data	no data	0.439958186	no data	0.05689895
no data	no data	15.89245545	2.58439E-05	0.130022601	no data	no data	no data	no data	no data	no data	0.473179212	no data	0.059185034
no data	no data	16.82232045	2.91627E-05	0.146661363	no data	no data	no data	no data	no data	no data	0.532419403	no data	0.064800816
no data	no data	29.59788245	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	0	no data	0	no data	no data	no data	no data	no data	no data	0	no data	0
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	16.07288076	no data	0.114157323	no data	no data	no data	no data	no data	no data	no data	no data	1.623426334
no data	no data	16.03714129	no data	0.113903484	no data	no data	no data	no data	no data	no data	no data	no data	1.619816502
no data	no data	11.77486262	no data	0.083388007	no data	no data	no data	no data	no data	no data	no data	no data	1.188011822
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	6.670662892	no data	0.001255808	no data	no data	no data	no data	no data	no data	0.186761971	no data	0.315416178
no data	no data	6.698763434	no data	0.001298132	no data	no data	no data	no data	no data	no data	0.189303908	no data	0.316918891
no data	no data	7.631695309	no data	0.053811538	no data	no data	no data	no data	no data	no data	no data	no data	0.768732102
no data	no data	1.834254917	no data	0.012818711	no data	no data	no data	no data	no data	no data	no data	no data	0.184145271
no data	no data	91.46743737	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	91.45885554	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	9.700968283	0	0	no data	no data	no data	no data	no data	no data	0	no data	0
no data	no data	15.5953051	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	15.5949699	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	17.27016021	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	17.27022	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	105.9590287	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	17.47572016	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	15.59573324	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	16.18618078	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	16.1874786	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	16.18153546	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	15.88498955	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	0.000547767	0.072848882	no data	no data	no data	no data	no data	no data	0.149949684	no data	no data
no data	no data	94.869434	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	0.000856942	0.107113224	no data	no data	no data	no data	no data	no data	0.183645338	no data	no data
no data	no data	91.97512582	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	2.40679E-12	0.107916805	no data	no data	no data	no data	no data	no data	0.795149241	no data	no data
no data	no data	14.45969838	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	22.9065966	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data

Dibromoethane (1,2) (ethylene dibromide)	Dichloroethane (1,2)	Diethanolamine (DEA)	Ethylbenzene	Ethylene glycol	Hexane (n-)	Hydrogen fluoride	Iso-octane (2,2,4 trimethylpentane)	Total loss components in the "HAP" set (lbs) Lead
no data	no data	no data	4.44845428	no data	no data	no data	no data	no data
no data	no data	no data	0.873141216	no data	8.363857362	no data	0.302030266	0
no data	no data	no data	0.881889644	no data	8.372658598	no data	0.302910389	0
no data	no data	no data	0.994422834	no data	no data	no data	no data	no data
no data	no data	no data	0.841050575	no data	8.350496017	no data	0.299377964	0
no data	no data	no data	0.862927592	no data	8.353809162	no data	0.301009651	0
no data	no data	no data	0.93367039	no data	8.829177458	no data	0.319712241	0
no data	no data	no data	2.529902145	no data	no data	no data	no data	no data
no data	no data	no data	0	no data	0	no data	0	no data
no data	no data	no data	0.12883958	no data	no data	no data	no data	no data
no data	no data	no data	0.618737531	no data	no data	no data	no data	no data
no data	no data	no data	0.618737531	no data	no data	no data	no data	no data
no data	no data	no data	0.618737531	no data	no data	no data	no data	no data
no data	no data	no data	0.618737531	no data	no data	no data	no data	no data
no data	no data	no data	9.972152487	no data	0	no data	no data	no data
no data	no data	no data	9.949978528	no data	0	no data	no data	no data
no data	no data	no data	7.299673518	no data	0	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	69.85724482	no data	no data	no data	no data	no data
no data	no data	no data	46.68948141	no data	no data	no data	no data	no data
no data	no data	no data	52.13396835	no data	no data	no data	no data	no data
no data	no data	no data	69.81422828	no data	no data	no data	no data	no data
no data	no data	no data	47.4875141	no data	no data	no data	no data	no data
no data	no data	no data	69.85946298	no data	no data	no data	no data	no data
no data	no data	no data	0.93469214	no data	78.05648641	no data	12.8674654	no data
no data	no data	no data	0.938850467	no data	78.38541897	no data	12.92196369	no data
no data	no data	no data	4.725494209	no data	0	no data	no data	no data
no data	no data	no data	1.132974914	no data	0	no data	no data	no data
no data	no data	no data	0.090417644	no data	0	no data	no data	no data
no data	no data	no data	0.090339271	no data	0	no data	no data	no data
no data	no data	no data	0.818791274	no data	0	no data	0	0
no data	no data	no data	1.304430452	no data	no data	no data	no data	no data
no data	no data	no data	1.304171865	no data	no data	no data	no data	no data
no data	no data	no data	0.165865021	no data	no data	no data	no data	no data
no data	no data	no data	0.133601344	no data	no data	no data	no data	no data
no data	no data	no data	1.490272007	no data	no data	no data	no data	no data
no data	no data	no data	1.490319534	no data	no data	no data	no data	no data
no data	no data	no data	0.106075361	no data	0	no data	no data	no data
no data	no data	no data	1.500184229	no data	no data	no data	no data	no data
no data	no data	no data	1.304760728	no data	no data	no data	no data	no data
no data	no data	no data	1.393233721	no data	no data	no data	no data	no data
no data	no data	no data	1.394265325	no data	no data	no data	no data	no data
no data	no data	no data	1.38954129	no data	no data	no data	no data	no data
no data	no data	no data	2.567366233	no data	no data	no data	no data	no data
no data	no data	no data	2.569397754	no data	no data	no data	no data	no data
no data	no data	no data	2.100514752	no data	no data	no data	no data	no data
no data	no data	no data	1.329171974	no data	no data	no data	no data	no data
no data	no data	no data	2.658431259	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	3.04315E-05
no data	no data	no data	0.093751874	no data	0	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	4.76079E-05
no data	no data	no data	0.091812775	no data	0	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	1.97887E-28
no data	no data	no data	1.241598469	no data	no data	no data	no data	no data
no data	no data	no data	22.69616692	no data	no data	no data	no data	no data
no data	no data	no data	0.022304566	no data	0	no data	no data	no data

MDI (methylene diphenyl diisocyanate)	Mercury	Methanol (methyl alcohol)	Methyl isobutyl ketone (hexone)	Methylene chloride (dichloromethane)	MTBE (Methyl tert-butyl ether)	Naphthalene	Nickel	PACs (Chrysene)	Phenanthrene
no data	no data	no data	no data	no data	no data	0.0702654	no data	no data	no data
no data	0	no data	no data	no data	no data	0.13288489	no data	0	no data
no data	0	no data	no data	no data	no data	0.13622936	no data	0	no data
no data	no data	no data	no data	no data	no data	0.051900386	no data	no data	no data
no data	0	no data	no data	no data	no data	0.11995245	no data	0	no data
no data	0	no data	no data	no data	no data	0.128972316	no data	0	no data
no data	0	no data	no data	no data	no data	0.145078488	no data	0	no data
no data	no data	no data	no data	no data	no data	0.021002791	no data	no data	no data
no data	no data	no data	no data	no data	no data	0	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.011827484	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.023840378	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.023840378	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.023840378	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.023840378	no data	no data	no data
no data	no data	no data	no data	no data	no data	3.834161311	no data	no data	no data
no data	no data	no data	no data	no data	no data	3.825635716	no data	no data	no data
no data	no data	no data	no data	no data	no data	2.803303238	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.896026254	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.598864173	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.667964046	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.895474501	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.609100165	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.896054705	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.065319934	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.066187301	no data	no data	no data
no data	no data	no data	no data	no data	no data	1.811514182	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.432749832	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	0	no data	no data	no data	no data	0.009471928	no data	0	no data
no data	no data	no data	no data	no data	no data	0.007937556	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.007908824	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.006911685	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.004384239	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.026961867	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.026977199	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.024468107	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.007974253	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.024272902	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.024605678	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.023081795	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.045933251	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.046836149	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.03989217	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.008124085	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.047457438	no data	no data	no data
no data	6.16498E-08	no data	no data	no data	no data	no data	no data	8.52082E-06	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	9.59968E-08	no data	no data	no data	no data	no data	no data	1.33302E-05	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	7.15942E-09	no data	no data	no data	no data	no data	no data	2.93198E-12	no data
no data	no data	no data	no data	no data	no data	0.020907257	no data	no data	no data
no data	no data	no data	no data	no data	no data	0.290321289	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data

Phenol	Propylene oxide	Styrene	Tetra ethyl lead	Tetrachloroethylene	Toluene	Toluene diisocyanate	Xylene	Xylene (m-)	Xylene (o-)	Xylene (p-)
no data	no data	no data	no data	no data	15.71528522	no data	no data	no data	5.238135016	8.775691418
0.035700806	no data	0	0	no data	12.61368161	no data	0	7.387477064	1.188974555	3.698476535
0.036580929	no data	0	0	no data	12.67167295	no data	0	7.467568306	1.203558202	3.737113958
no data	no data	no data	no data	no data	3.317149389	no data	no data	no data	1.212322829	1.973410184
0.032302069	no data	0	0	no data	12.42042707	no data	0	7.091792737	1.134647962	3.556196053
0.034671235	no data	0	0	no data	12.54621139	no data	0	7.2939493	1.171938448	3.653361451
0.038950718	no data	0	0	no data	13.38499543	no data	0	7.908659465	1.275383307	3.95719094
no data	no data	no data	no data	no data	73.787974	no data	no data	no data	2.558320625	8.166039868
0	no data	0	0	no data	0	no data	no data	0	0	0
no data	no data	no data	no data	no data	0.407464179	no data	no data	no data	0.162447146	0.257463196
no data	no data	no data	no data	no data	2.137627945	no data	no data	no data	0.74224914	1.225882027
no data	no data	no data	no data	no data	2.137627945	no data	no data	no data	0.74224914	1.225882027
no data	no data	no data	no data	no data	2.137627945	no data	no data	no data	0.74224914	1.225882027
no data	no data	no data	no data	no data	2.137627945	no data	no data	no data	0.74224914	1.225882027
no data	no data	no data	no data	no data	9.776549179	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	9.754810162	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	7.159482352	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	251.0478546	no data	no data	no data	81.75069448	137.8265329
no data	no data	no data	no data	no data	167.7892418	no data	no data	no data	54.6385352	92.11713636
no data	no data	no data	no data	no data	187.427791	no data	no data	no data	61.00329191	102.8605839
no data	no data	no data	no data	no data	250.8932649	no data	no data	no data	81.70035422	137.7416624
no data	no data	no data	no data	no data	170.6571532	no data	no data	no data	55.57243586	93.69163417
no data	no data	no data	no data	no data	251.0558261	no data	no data	no data	81.75329029	137.8309093
0.015023995	no data	0	0	no data	6.920629017	no data	no data	3.219080749	0	2.446098614
0.015183189	no data	0	0	no data	6.950131859	no data	no data	3.233540681	0	2.457040607
no data	no data	no data	no data	no data	4.637647248	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	1.113339057	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	3.359541113	no data	no data	no data	0.12874404	0.465373673
no data	no data	no data	no data	no data	3.358522266	no data	no data	no data	0.128587294	0.464942623
0	no data	0	0	no data	46.59828148	no data	0	0	0.650112478	2.15673851
no data	no data	no data	no data	no data	38.62683649	no data	no data	no data	1.307482585	4.204618069
no data	no data	no data	no data	no data	38.62415485	no data	no data	no data	1.307118649	4.203727381
no data	no data	no data	no data	no data	0.571552875	no data	no data	no data	0.199456737	0.328826527
no data	no data	no data	no data	no data	0.466943101	no data	no data	no data	0.159292574	0.264487184
no data	no data	no data	no data	no data	119.4543323	no data	no data	no data	0.924927415	3.194406748
no data	no data	no data	no data	no data	119.4556677	no data	no data	no data	0.92496881	3.194515601
no data	no data	no data	no data	no data	3.906093942	no data	no data	no data	0.151850724	0.546435826
no data	no data	no data	no data	no data	120.7058829	no data	no data	no data	0.928881785	3.214364758
no data	no data	no data	no data	no data	38.63026157	no data	no data	no data	1.307947418	4.205755685
no data	no data	no data	no data	no data	111.86693	no data	no data	no data	0.863872093	2.985992405
no data	no data	no data	no data	no data	111.8959147	no data	no data	no data	0.864770587	2.988355112
no data	no data	no data	no data	no data	111.7631846	no data	no data	no data	0.860656105	2.977535547
no data	no data	no data	no data	no data	9.049458755	no data	no data	no data	3.028510458	5.066730315
no data	no data	no data	no data	no data	9.051941725	no data	no data	no data	3.031896326	5.071019081
no data	no data	no data	no data	no data	7.390836918	no data	no data	no data	2.48049448	4.146123528
no data	no data	no data	no data	no data	39.34979084	no data	no data	no data	1.332447645	4.284428756
no data	no data	no data	no data	no data	9.370269643	no data	no data	no data	3.135877093	5.246395375
0.02021611	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	3.48444843	no data	no data	no data	0.133459379	0.482508104
0.023547165	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	3.388137873	no data	no data	no data	0.131253957	0.472847986
0.127677786	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
no data	no data	no data	no data	no data	99.85270191	no data	no data	no data	0.769182097	2.680702409
no data	no data	no data	no data	no data	81.64218607	no data	no data	no data	26.55306731	44.78069701
no data	no data	no data	no data	no data	0.832843426	no data	no data	no data	0.031824785	0.114983848

Fugitive Emission Factors

Equipment Type	Light Liq. (lb/hr)[1]	Vap. (lb/hr)[1]
Valves	9.46E-05	2.86E-05
Fittings	1.76E-05	9.24E-05
Pump Seals	1.19E-03	1.43E-04
Others	2.86E-04	2.64E-04

Liq. = Light Liquid Emission Factor
Vap. = Vapor Emission Factor
Source: (1) Protocol for Equipment Leak Emission Estimates, EAP-453/R-95-017, Nov. 1995, Table 2-3.

TERMINAL PETROLEUM LOADING RACK PTE

Product Loaded	S	P	M	T (°F)	T (°R)	L_L ($lb/10^3$	Throughput (10^3 gal)	Throughput (10^3 bbl)	Emission (ton/yr)	Stream ID
Motor Gasoline	0.5	7.826	66	82.72	543	5.9	70,518		209.06	47
Diesel	0.5	0.018	130	80.48	540	0.0	30,660		0.41	6
Jet Fuel	0.5	0.018	130	80.78	541	0.0	91,980		1.22	51
								PTE for VOC	210.69	

load rack

L_L = 12.46*SPM/T

S = 0.5 saturation factor from AP-42 Table 5.2-1 (6/08) for submerged truck loading of a clean cargo tank

P = true vapor pressure of liquid loaded psia from TankESP output, annual average

M = molecular weight of vapors lb/lb mole from TankESP data, annual average

T = temperature °R (°F+460), mean temperature data taken from TankESP output, annual average

Motor Gasoline: 1,679,000 barrels per any rolling twelve (12) month pe
Diesel: 730,000 barrels per any rolling twelve (12) month period;
Jet Fuel: 2,190,000 barrels per any rolling twelve (12) month period;

bbl/yr	bbl/day	gal/day	Liters/day
1,679,000	4,600	193,200	731,342
730,000	2,000	84,000	317,975
2,190,000	6,000	252,000	953,924
Total:	**4,599,000**		
	1.93E+08 gal/yr		

TERMINAL LDAR AND NON-LDAR FUGITIVE PTE
AREA 20 B&S + LPG SPECIATED VOC EMISSIONS (TON/YEAR) BY COMPONENT TYPE

COMPONENT COUNTS

Stock		Gasoline - Average	Aviation Gas - Average	Fuel Oil #6 - Average	Recovered Oil (as Kerosene)	Naphtha - Average	Crude - Taps/Belinda Group	Crude - Minas Group	Crude - Widuri Group	Crude - ANS Group	White Oil	No Species	B&S Monitored Components: All Species	LPG Non-Monitored	LPG Monitored
AEI Product #		1	3	5	7	9	11	12	13	14	50	99	NA	NA	NA
Stream Lookup Number		47	50	6	63	11	55	55	55	55	62	23	69	54	54
Valves	Vap.	0	0	0	0	0	0	0	0	0	0	77	12	30	373
Valves	Light Liq.	816	0	4	5	132	152	15	51	103	87	124	3801	226	407
Connectors/Flanges	Vap.	0	0	0	0	0	0	0	0	0	0	251	0	126	0
Connectors/Flanges	Light Liq.	3723	0	13	13	652	637	95	280	749	633	568	19	835	0
Pump Seals	Vap.	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Pump Seals	Light Liq.	11	0	0	0	5	0	0	0	8	17	4	84	2	9
Others	Vap.	0	0	0	0	0	0	0	0	0	0	10	0	0	0
Others	Light Liq.	25	0	0	0	3	4	1	5	6	15	0	2	0	0

TOTAL VOC EMISSIONS (LB/YR) BY STREAM AND COMPONENET TYPE

Stock		Gasoline - Average	Aviation Gas - Average	Fuel Oil #6 - Average	Recovered Oil (as Kerosene)	Naphtha - Average	Crude - Taps/Belinda Group	Crude - Minas Group	Crude - Widuri Group	Crude - ANS Group	White Oil	No Species	B&S Monitored Components: All Species	LPG Non-Monitored	LPG Monitored
AEI Product #		1	3	5	7	9	11	12	13	14	50	99	NA	NA	NA
Stream Lookup Number		47	50	6	63	11	55	55	55	55	62	23	69	54	54
Valves	Vap.	--	--	--	--	--	--	--	--	--	--	19.3	3.0	7.5	93.4
Valves	Light Liq.	676.2	--	3.3	4.1	109.4	126.0	12.4	42.3	85.4	72.1	102.8	3149.9	187.2	337.3
Connectors/Flanges	Vap.	--	--	--	--	--	--	--	--	--	--	203.2	--	102.3	--
Connectors/Flanges	Light Liq.	574.0	--	2.0	2.0	100.5	98.2	14.6	43.2	115.5	97.6	87.6	2.9	128.8	--
Pump Seals	Vap.	--	--	--	--	--	--	--	--	--	--	--	--	--	5.0
Pump Seals	Light Liq.	114.5	--	--	--	52.0	--	--	--	83.3	176.9	41.6	874.2	20.8	93.7
Others	Vap.	--	--	--	--	--	--	--	--	--	--	23.1	--	--	--
Others	Light Liq.	62.6	--	--	--	7.5	10.0	2.5	12.5	15.0	37.6	--	5.0	--	--
	Total:	**1427.3**	--	**5.3**	**6.1**	**269.5**	**234.2**	**29.6**	**98.0**	**299.1**	**384.2**	**477.5**	**4035.0**	**446.6**	**529.4**

HAP EMISSIONS (LB/YR) BY STREAM

Stock	AEI Product #	Stream Lookup Number	Total VOC (lb/yr)	BENZENE CAS# 71432	NAPHTHALENE CAS# 91203	O-XYLENE CAS# 95476	ETHYLBENZENE CAS# 100414	P-XYLENE CAS# 106423	DIBROMIDE CAS# 106934	DICHLORIDE CAS# 107062	M-XYLENE CAS# 108383	TOLUENE CAS# 108883	1,3-BUTADIENE CAS# 106990	n-HEXANE CAS# 110543	ANILINE CAS# 62533
				1	2	3	4	5	6	7	8	9	10	11	12
Gasoline - Average	1	47	1427.3	5.493	1.273	5.105	4.346	12.590	0.000	0.000	0.000	107.430	0.000	0.000	0.000
Aviation Gas - Average	3	50	0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Fuel Oil #6 - Average	5	6	5.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Recovered Oil (as Kerosene)	7	63	6.1	0.012	0.029	0.049	0.015	0.023	0.000	0.000	0.060	0.039	0.000	0.087	0.000
Naphtha - Average	9	11	269.5	5.904	0.000	0.113	0.059	0.299	0.000	0.000	0.000	0.695	0.000	0.000	0.000
Crude - Taps/Belinda Group	11	55	234.2	0.682	0.089	0.388	0.233	1.028	0.000	0.000	2.131	1.543	0.000	0.000	0.023
Crude - Minas Group	12	55	29.6	0.086	0.011	0.049	0.029	0.130	0.000	0.000	0.269	0.195	0.000	0.000	0.003
Crude - Widuri Group	13	55	98.0	0.285	0.037	0.162	0.097	0.430	0.000	0.000	0.891	0.645	0.000	0.000	0.010
Crude - ANS Group	14	55	299.1	0.871	0.114	0.496	0.297	1.313	0.000	0.000	2.722	1.971	0.000	0.000	0.030
White Oil	50	62	384.2	1.767	1.806	4.572	1.729	2.689	0.002	0.000	6.685	8.606	0.000	0.192	0.004
No Species	99	23	477.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
B&S Monitored Components: All Species	NA	69	4035.0	147.513	281.392	96.449	153.993	55.674	1.716	0.000	143.822	607.479	1.480	288.507	0.000
LPG Non-Monitored	NA	54	446.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
LPG Monitored	NA	54	529.4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000
		total lb/yr	**8241.8709**	**162.6143**	**284.7509**	**107.3830**	**160.7988**	**74.1767**	**1.7181**	**0.0000**	**156.5806**	**728.6040**	**1.4900**	**288.7862**	**0.0700**
		ton/yr	**4.12**	**0.08**	**0.14**	**0.05**	**0.08**	**0.04**	**0.00**	**0.00**	**0.08**	**0.36**	**0.00**	**0.14**	**0.00**

CRESOL MIXTURE CAS# 1319773	PHENOL CAS# 108952	STYRENE CAS# 100425	METHANOL CAS# 67561	NICKEL CAS#	LEAD CAS#	HCL CAS# 7647010	PERCHLOROETHYLENE CAS# 127184	CYCLOHEXANE CAS# 110827	BIPHENYL CAS# 92524	2,2,4 TRIMETHYLPENTANE CAS# 540841	CUMENE CAS# 98828	O-TOLUIDINE CAS# 95534	ACRYLAMIDE CAS# 79061	COMPOUNDS CAS#	ARSENIC CAS#	PROPYLENE CAS# 115071	COMPOUNDS CAS#	1,2,4-TMBenzene CAS# 95636	ETHYLENE CAS# 74851	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.638	0.000	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
0.089	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.002	0.043	0.010	0.005	0.000	0.000	0.000	0.000	0.000	0.044	0.000	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.046	0.000	
0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.234	0.094	0.000	0.023	0.023	0.000	0.000	0.000	0.000	0.000	0.272	0.000	
0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.012	0.000	0.003	0.003	0.000	0.000	0.000	0.000	0.000	0.034	0.000	
0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.098	0.039	0.000	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.114	0.000	
0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.299	0.120	0.000	0.030	0.030	0.000	0.000	0.000	0.000	0.000	0.347	0.000	
0.115	0.077	0.000	0.000	0.000	0.000	0.000	0.000	2.881	0.115	1.921	0.077	0.077	0.000	0.000	0.000	0.000	0.000	3.035	0.000	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
35.439	2.417	0.124	0.000	0.000	1.967	0.000	0.000	155.244	0.751	235.974	4.728	0.000	0.000	0.000	0.000	82.904	0.047	144.026	103.594	
0.000	0.000	0.000	0.223	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045	192.053	0.045	0.000	0.000	
0.000	0.000	0.000	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.053	227.643	0.053	0.000	0.000	Total HAP
35.6487	**2.5654**	**0.1239**	**0.4880**	**0.0000**	**1.9670**	**0.0000**	**0.0000**	**158.8075**	**1.1373**	**237.9377**	**4.8811**	**0.1478**	**0.0000**	**0.0000**	**0.0976**	**502.6004**	**0.1442**	**165.5557**	**103.5941**	**3182.7**
0.02	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.08**	**0.00**	**0.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.25**	**0.00**	**0.08**	**0.05**	**1.6**

TERMINAL TOTAL COMPONENT COUNTS

AREA NUMBER	AREA DESCRIPTION	SERVICE	COMPONENT TYPE			
			Valves	Connectors/Flanges	Pump Seals	Others
20	LPG AREA AND FIELD PIPING AND BLENDING AND SHIPPING STORAGE TANKS	ALL	6,415	8,595	144	71
TOTAL		ALL	6,415	8,595	144	71

Speciation Data

HAPS COMPOSITIONS IN STREAMS (LOOKUP TABLE)
TITLE V AIR PERMIT
IES DOWNSTREAM, LLC

DATE OF LAST REVISION: 21-Sep-22

		STREAM LOOKUP NUMBER	API°	DENSITY (lb/bbl)	DENSITY (lb/gal)	AVERAGE LIQ WT FRACT VOC IN STREAM	BENZENE CAS# 71432 liq wt (%)	NAPHTHALENE CAS# 91203 liq wt (%)	O-XYLENE CAS# 95476 liq wt (%)	ETHYLBENZENE CAS# 100414 liq wt (%)	P-XYLENE CAS# 106423 liq wt (%)	ETHYLENE DIBROMIDE CAS# 106934 liq wt (%)	ETHYLENE DICHLORIDE CAS# 107062 liq wt (%)	M-XYLENE CAS# 108383 liq wt (%)
PLANT	BLEND COMPONENTS						1	2	3	4	5	6	7	8
CU	ATMOS OVHD LIQ	1	67	250	5.95	1.00	1.17%	0.01%	0.71%	0.00%	0.54%	0.00%	0.00%	1.31%
	STAB OVHD	2	90	224	5.32	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LSR	3	77	243	5.79	1.00	2.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	HSR	4	62	256	6.09	1.00	1.24%	0.00%	1.03%	0.00%	0.00%	0.00%	0.00%	1.89%
	LGO	5	47	277	6.61	1.00	0.00%	1.00%	2.01%	0.00%	0.00%	0.00%	0.00%	2.07%
	HGO (Diesel)	6	37	294	7.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	VGO (AVERAGE) (USE FCC feed)	7	28	311	7.39	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	RESID (& ASPHALT)	8	15	338	8.05	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	SPLITTER FEED	9	64	253	6.02	1.00	1.33%	0.00%	0.81%	0.00%	0.62%	0.00%	0.00%	1.50%
	ACCUMULATOR GAS	10					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	WSR	11	74.4	243	5.79	1	2.19%	0.00%	0.04%	0.02%	0.11%	0.00%	0.00%	0.00%
		12												
FCC	FRAC VAPOR	13				1.00	0.74%	0.00%	0.75%	0.58%	0.74%	0.00%	0.00%	1.83%
	SEC. LEAN OIL	14	73	242	5.76	1.00	1.27%	0.00%	1.29%	1.00%	1.28%	0.00%	0.00%	3.15%
	EQUIL. MIX	15				1.00	0.50%	0.43%	1.15%	0.55%	0.80%	0.00%	0.00%	2.05%
	RICH SPONGE OIL	16	18	331	7.88	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ABSORBER GAS	17				1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	FUEL GAS (MIXDRUM)	18				1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C4 OLEFINS	19	135	186	4.43	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C3-C4 MIX OLEFINS	20				1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LCC	21	73	242	5.77	1.00	0.75%	0.00%	1.29%	1.00%	1.28%	0.00%	0.00%	3.15%
	HCC	22	32	303	7.21	1.00	0.01%	3.31%	4.97%	1.21%	2.31%	0.00%	0.00%	6.31%
	LCO	23	18	331	7.89	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	FRAC BTMS	24	2.5	370	8.80	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DEBUT FEED	25				1.00	0.71%	0.00%	0.73%	0.56%	0.72%	0.00%	0.00%	1.77%
		26												
		27												
		28												
ALKY	LER BOTTOMS	29	135	186	4.43	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LA	30	72	243	5.79	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	HA	31	40	289	6.88	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ISOM RX EFFLUENT	32	135	186	4.43	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	CHLORIDE CHEMICAL	33		571	13.60	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
H=	H= PLT C4'S	34	135	186	4.43	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		35												
		36												
DIM	DIM FD	37	140	182	4.34	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DIM STAB OVHD	38	140	182	4.34	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DIMATE	39	70	246	5.85	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	REACTOR EFFLUENT	40	84	233	5.55	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	NICKEL CATALYST	41		406	9.67	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
B&S	MINAS	42	32	303	7.21	1.00	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ANS	43	33	301	7.17	1.00	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	WIDURI	44	28	311	7.41	1.00	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BELIDA	45	43	281	6.69	1.00	0.39%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	PUL	46	57	236	5.63	1.00	0.39%	0.10%	0.27%	0.31%	0.71%	0.00%	0.00%	0.00%
	MUL (Use for Mogas)	47	59	246	5.86	1.00	0.38%	0.09%	0.36%	0.30%	0.88%	0.00%	0.00%	0.00%
	RUL	48	60	248	5.91	1.00	0.35%	0.03%	0.38%	0.27%	0.93%	0.00%	0.00%	0.00%
	JP-8	49	46	278	6.63	1.00	0.00%	1.02%	2.00%	0.72%	0.86%	0.00%	0.00%	2.09%
	AVGAS	50	72	244	5.81	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%
	JET-A	51	47	279	6.65	1.00	0.00%	0.04%	0.15%	0.09%	0.19%	0.00%	0.00%	0.00%
	LSFO (Same as LFO)	52				1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	MOTOR LPG	53	146	178	4.24	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	COMMERCIAL LPG	54	141	182	4.33	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	CRUDE_MAX	55	34	298.74	7.11	1.00	0.29%	0.04%	0.17%	0.10%	0.44%	0.00%	0.00%	0.91%
		56												
	REFORMATE	57	57	263	6.26	1.00	7.06%	0.09%	7.51%	4.62%	6.61%	0.00%	0.00%	14.87%
	AVIATION TEL	58	N/A	611	14.55	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	12.00%	0.00%
	TOLUENE	59	31	306	7.29	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		60												
		61												
	WHITE OIL	62	54	267	6.36	1.00	0.46%	0.47%	1.19%	0.45%	0.70%	0.00%	0.00%	1.74%
	RO	63	38	291	6.93	1.00	0.19%	0.47%	0.80%	0.25%	0.38%	0.00%	0.00%	0.98%
	BRU BTEX OFFGAS	64				0.10	30.00%	0.00%	0.30%	0.00%	0.30%	0.00%	0.00%	0.30%
		65												
MISC	MEA	66	2	371	8.83	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	SPENT CAUSTIC	67				0.00	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%
	DESALTER CHEMICAL	68	14	340	8.10	1.00	0.00%	10.00%	3.30%	10.00%	3.30%	0.00%	0.00%	3.30%
	LEAKDAS B&S	69				1.00	3.66%	6.97%	2.39%	3.82%	1.38%	0.04%	0.00%	3.56%
		70												
	NO HAPS	71				1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ULMAX - PAR	72	59	248	5.91	1	1.25%	0.15%	2.23%	1.35%	5.49%	0.00%	0.00%	0.00%
	PUL - PAR	73	59	236	5.63	1.00	0.43%	0.15%	0.55%	0.45%	1.19%	0.00%	0.00%	0.00%
	RUL - PAR	74	58	248	5.91	1.00	1.25%	0.04%	2.23%	1.35%	5.49%	0.00%	0.00%	0.00%

Speciation Data

HAPS COMPOSITIONS IN STREAMS
TITLE V AIR PERMIT
IES DOWNSTREAM, LLC

		TOLUENE	1,3-BUTADIENE	n-HEXANE	ANILINE	CRESOL MIXTURE	PHENOL	STYRENE	METHANOL	NICKEL	LEAD	HCL	PERCHLOROETHYLENE	CYCLOHEXANE	BIPHENYL
		CAS# 108883	CAS# 106990	CAS# 110543	CAS# 62533	CAS# 1319773	CAS# 108952	CAS# 100425	CAS# 67561	CAS#	CAS#	S# 7647010	CAS# 127184	CAS# 110827	CAS# 92524
		liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	(wt %)	liq wt (%)
PLANT	BLEND COMPONENTS	9	10	11	12	13	14	15	16	17	18	19	20	21	22
CU	ATMOS OVHD LIQ	3.54%	0.00%	7.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	STAB OVHD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LSR	1.18%	0.00%	4.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.28%	0.00%
	HSR	4.82%	0.00%	3.09%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.66%	0.00%
	LGO	0.00%	0.00%	0.00%	0.00%	0.10%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
	HGO (Diesel)	0.00%	0.00%	0.00%	0.00%	0.10%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
	VGO (AVERAGE) (USE FCC feed)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	RESID (& ASPHALT)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%
	SPLITTER FEED	4.06%	0.00%	7.50%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ACCUMULATOR GAS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0	0.00%
	WSR	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
FCC	FRAC VAPOR	4.28%	0.15%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	SEC. LEAN OIL	7.38%	0.00%	1.00%	0.01%	0.00%	0.01%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	EQUIL. MIX	2.98%	0.10%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	RICH SPONGE OIL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ABSORBER GAS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	FUEL GAS (MIXDRUM)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C4 OLEFINS	0.00%	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C3-C4 MIX OLEFINS	0.00%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LCC	7.38%	0.00%	0.81%	0.01%	0.00%	0.01%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	HCC	0.76%	0.00%	0.00%	0.10%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LCO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	FRAC BTMS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
	DEBUT FEED	4.15%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ALKY	LER BOTTOMS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LA	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	HA	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ISOM RX EFFLUENT	0.00%	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	CHLORIDE CHEMICAL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	1.00%	0.00%
H=	H= PLT C4'S	0.00%	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%
DIM	DIM FD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DIM STAB OVHD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DIMATE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	REACTOR EFFLUENT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	NICKEL CATALYST	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.10%	0.00%	0.00%	0.00%	0.00%	0.00%
B&S	MINAS	0.00%	0.00%	0.00%	0.01%	0.14%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ANS	0.00%	0.00%	0.00%	0.01%	0.14%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	WIDURI	0.00%	0.00%	0.00%	0.01%	0.14%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BELIDA	0.00%	0.00%	0.00%	0.01%	0.14%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	PUL	8.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	MUL (Use for Mogas)	7.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	RUL	2.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	JP-8	0.57%	0.00%	5.87%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AVGAS	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%
	JET-A	0.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LSFO (Same as LFO)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%
	MOTOR LPG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	COMMERCIAL LPG	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	CRUDE_MIX	0.66%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.04%
	REFORMATE	37.44%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	0.00%
	AVIATION TEL	3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	61.00%	0.00%	0.00%	0.00%	0.00%
	TOLUENE	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	WHITE OIL	2.24%	0.00%	0.05%	0.00%	0.03%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.75%	0.03%
	RO	0.64%	0.00%	1.42%	0.00%	1.45%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.35%	0.03%
	BRU BTEX OFFGAS	5.00%	3.00%	1.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MISC	MEA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	SPENT CAUSTIC	0.01%	0.01%	0.01%	0.00%	0.01%	0.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%
	DESALTER CHEMICAL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LEAKDAS B&S	15.06%	0.04%	7.15%	0.00%	0.88%	0.06%	0.00%	0.00%	0.00%	0.05%	0.00%	0.00%	3.85%	0.02%
	NO HAPS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ULMAX - PAR	11.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	PUL - PAR	11.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	RUL - PAR	9.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Speciation Data

HAPS COMPOSITIONS IN STREAMS
TITLE V AIR PERMIT
IES DOWNSTREAM, LLC

		2,2,4 TRIMETHYLPENTANE	CUMENE	O-TOLUIDINE	ACRYLAMIDE	ANTIMONY COMPOUNDS	ARSENIC	CYANIDE PROPYLENE	CYANIDE COMPOUNDS	1,2,4-TMBenzene	ETHYLENE
		CAS# 540841	CAS# 98828	CAS# 95534	CAS# 79061	CAS#	CAS#	CAS# 115071	CAS#	CAS# 95636	CAS# 74851
		liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	liq wt (%)	(wt %)	liq wt (%)	(wt %)	(wt %)
PLANT	BLEND COMPONENTS	23	24	25	26	27	28	29	30	31	32
CU	ATMOS OVHD LIQ	0.80%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	STAB OVHD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LSR	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	HSR	0.80%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LGO	0.00%	0.10%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.73%	0.00%
	HGO (Diesel)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	VGO (AVERAGE) (USE FCC feed)	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	0.01%	0.00%	0.00%
	RESID (& ASPHALT)	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
	SPLITTER FEED	0.80%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ACCUMULATOR GAS	0.00%	0.00%	0	0	0	0	0	0	0	0
	WSR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%
FCC	FRAC VAPOR	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
	SEC. LEAN OIL	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	EQUIL. MIX	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
	RICH SPONGE OIL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ABSORBER GAS	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
	FUEL GAS (MIXDRUM)	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	8.71%	0.01%	0.00%	9.72%
	C4 OLEFINS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	C3-C4 MIX OLEFINS	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
	LCC	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%
	HCC	0.00%	0.01%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.74%	0.00%
	LCO	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	FRAC BTMS	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	0.01%	0.00%	0.00%
	DEBUT FEED	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	0.01%	0.00%	0.00%
ALKY	LER BOTTOMS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LA	2.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	HA	2.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ISOM RX EFFLUENT	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	CHLORIDE CHEMICAL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
H=	H= PLT C4'S	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DIM	DIM FD	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	73.00%	0.01%	0.00%	0.20%
	DIM STAB OVHD	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	19.00%	0.01%	0.00%	0.20%
	DIMATE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	0.00%	0.00%
	REACTOR EFFLUENT	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%
	NICKEL CATALYST	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
B&S	MINAS	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ANS	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	WIDURI	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	BELIDA	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	PUL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.48%	0.00%
	MUL (Use for Mogas)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.24%	0.00%
	RUL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.25%	0.00%
	JP-8	0.80%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AVGAS	2.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	JET-A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.42%	0.00%
	LSFO (Same as LFO)	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%	0.01%	0.00%	0.00%
	MOTOR LPG	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.24%	0.01%	0.00%	0.00%
	COMMERCIAL LPG	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	43.00%	0.01%	0.00%	0.00%
	CRUDE_MAX	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12%	0.00%
	REFORMATE	1.36%	0.87%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	AVIATION TEL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	TOLUENE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	WHITE OIL	0.50%	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.79%	0.00%
	RO	0.70%	0.17%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.00%
	BRU BTEX OFFGAS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MISC	MEA	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	SPENT CAUSTIC	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	DESALTER CHEMICAL	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	LEAKDAS B&S	5.85%	0.12%	0.00%	0.00%	0.00%	0.00%	2.05%	0.00%	3.57%	2.57%
	NO HAPS	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	ULMAX - PAR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.98%	0.00%
	PUL - PAR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.98%	0.00%
	RUL - PAR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.25%	0.00%

APPENDIX D. REDLINE PERMIT

ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.

   (Auth.: HAR §11-60.1-90)

2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be willfully defaced, altered, forged, counterfeited, or falsified.

   (Auth.: HAR §11-60.1-6; SIP §11-60-11)[2]

3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department, except as provided in HAR, Section 11-60.1-91.

   (Auth.: HAR §11-60.1-7; SIP §11-60-9)[2]

4. A request for transfer from person to person shall be made on forms furnished by the Department.

   (Auth.: HAR §11-60.1-7)

5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department and the U.S. Environmental Protection Agency (EPA), Region 9.

   (Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)

6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for CSP. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department, and the permit is amended to allow such deviation.

   (Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

   (Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1, and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

   (Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

   (Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

    (Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections, 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

    (Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

    (Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

    (Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department and U.S. EPA, Region 9, in writing of the following dates:

    a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;

b. The **actual date of construction commencement** within fifteen (15) days after such date; and
c. The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department but also directly to the U.S. EPA, Region 9, along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
b. The expected length of time that the air pollution control equipment will be out of service;
c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)[2]

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit**, the permittee shall immediately notify the Department of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

a. Identification of each affected emission point and each emission limit exceeded;
b. Magnitude of each excess emission;

c. Time and duration of each excess emission;
d. Identity of the process or control equipment causing the excess emission;
e. Cause and nature of each excess emission;
f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)[2]

18. The permittee may request confidential treatment of any records in accordance with HAR, Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

19. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

a. Within eighteen (18) months after the permit takes effect, is discontinued for a period of eighteen (18) months or more, or is not completed within a reasonable time.
b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions, of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

20. The Department may extend the time periods specified in Standard Condition No. 19 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

22. All certifications shall be in accordance with HAR, Section 11-60.1-4.

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

23. The permittee shall allow the Director, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
b. To sample or monitor at reasonable times substances or parameters to ensure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

24. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of a covered source covered by this permit**, the discontinuance shall be reported in writing to the Department by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)[2]

25. Each permit renewal application shall be submitted to the Department and the U.S. EPA, Region 9, no less than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Director may allow a permit renewal application to be submitted no less than six (6) months prior to the permit expiration date, if the Director determines that there is reasonable justification.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5(a)(1)(iii))[1]

26. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

27. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR, Section 11-60.1-86, the compliance certification shall be submitted to the Department and the U.S. EPA, Region 9, once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

28. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

State of Hawaii
Clean Air Branch

2827 Waimano Home Road, #130
Pearl City, HI 96782

Upon request and as required by this permit, all correspondence to the State of Hawaii Department associated with this CSP shall have duplicate copies forwarded to:

Manager
Enforcement Division, Air Section
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street, ENF-2-1
San Francisco, CA 94105

(Auth.: HAR §11-60.1-4, §11-60.1-90)

29. To determine compliance with submittal deadlines for time-sensitive documents, the postmark date of the document shall be used. If the document was hand-delivered, the date received ("stamped") at the Clean Air Branch shall be used to determine the submittal date.

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

---

[1]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.

[2]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.

ATTACHMENT IIA: SPECIAL CONDITIONS
LPG STORAGE AND ~~MISCELLANEOUS SOURCE OPERATIONS~~EQUIPMENT IN GASOLINE SERVICE
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

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 CSP encompasses the requirements for LPG storage and equipment in gasoline service ~~miscellaneous source operations~~ not included with the Special Conditions of Attachments IIB and IIC.

   (Auth.: HAR §11-60.1-3)

Section B. Applicable Federal Regulations

~~1. The LPG Refrigeration System 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 GGG, Standards of Performance for Equipment Leaks in Petroleum Refineries.~~1. The Blending and Shipping Area and Liquid Fuel System 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 BBBBBB, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, §60.590)[1]~~

~~2. The Blending and Shipping Area and Liquid Fuel System 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.~~

~~b. The above regulations are not applicable to any pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, or instrumentation system that is intended to operate in organic hazardous air pollutant service, as defined in 40 CFR §63.641, for less than 300 hours during the calendar year.~~

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

~~(~~Auth.: HAR §11-60.1-3, §11-60.1-90, §11.60.1-174, 40 CFR §63.~~640~~11080, §63.11081, §63.11082)[1]

3. The storage and use of flammable substances in this facility is subject to the provisions of 40 CFR Part 68, Chemical Accident Prevention Provisions. The permittee shall comply with all applicable requirements, including the submittal of:

   a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a); or
   b. As part of the compliance certification submitted pursuant to Attachment I, Standard Condition No. 28, a certification statement that the facility is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, 40 CFR §68)[1]

Section C. Operational and Emission Limitations

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

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

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

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

31. Leak Inspection

   a. The permittee shall perform monthly leak inspection of all equipment in gasoline service. For the monthly leak inspection, detection methods incorporating sight, sound and smell are acceptable.
   b. A log book shall be used and shall be signed by the responsible official or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.
   c. Each detection of a liquid or vapor leak shall be recorded in the log book.

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

   ~~a. Each compressor located at the LPG Refrigeration System shall be equipped and operated with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c), 40 CFR §60.482-3(h), and 40 CFR §60.482-3(i).~~
   ~~b. Each compressor seal system as required in Special Condition No. C.3.a of this attachment shall be as follows:~~

174; 40 CFR §63.11089)

42. Leak Repair

   a. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar

days after detection of each leak, except as provided in Attachment IIA, Special Condition No. C.2.b.

b. Delay of repair of leaking equipment will be allowed if the repair is not feasible within fifteen (15) days.

~~i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or~~

~~ii. Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10; or~~

~~iii. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.~~

~~c. The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.~~

~~d. A compressor is exempt from the requirements of Special Condition Nos. C.3.a and C.3.b of this attachment if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in Special Condition No. C.3.e of this attachment.~~

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.592)[1]~~

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

~~a. Except during pressure releases, each pressure relief device in gas/vapor service located at the LPG Refrigeration System shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).~~

~~b. *After each pressure release*, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, **as soon as practicable**, but no later than five (5) calendar days *after the pressure release*, except as provided in Special Condition No. C.7 of this attachment.~~

~~c. Any pressure relief device is exempt from the requirements of Special~~

~~Condition No. C.4.a and C.4.b of this attachment if it is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device that complies with the requirements of 40 CFR §60.482-10.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)[1]~~

~~5. Open Ended Valves/Lines~~

~~a. Each open-ended valve or line at the LPG Refrigeration System, Liquid Fuel System, and Blending and Shipping Area shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.~~
~~b. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.~~
~~c. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Special Condition No. C.5.a of this attachment at all other times.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

~~6. Sampling Connection Systems~~

~~a. Each sampling connection system at the LPG Refrigeration System, Liquid Fuel System, and Blending and Shipping Area shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c).~~
~~b. Each closed-purged, closed-loop, or closed-vent system shall comply with the following requirements:~~

~~i. Return the purged process fluid directly to the process line; or~~
~~ii. Collect and recycle the purged process fluid to a process; or~~
~~iii. Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.~~

~~c. In-situ sampling systems and sampling systems without purges are exempt from the requirements of Special Condition No. C.6.a and C.6.b of this attachment.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~11089)

~~7. Delay of Repair~~

~~a. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.~~

~~b. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.~~

~~c. Delay of repair for valves will be allowed if:~~

~~i. The permittee demonstrates that emissions of purged material resulting from the immediate repair are greater than the fugitive emissions likely to result from the delay of repair; and~~

~~ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with the requirements of 40 CFR §60.482-10.~~

~~d. Delay of repair for pumps will be allowed if:~~

~~i. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and~~

~~ii. Repair is completed as soon as practicable, but not later than six (6) months after the leak was detected.~~

~~e. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six (6) months after the first process unit shutdown.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

Section D. Monitoring and Recordkeeping Requirements

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

   (Auth.: HAR §11-60.1-3, §11-60.1-~~115~~15, §11-60.1-90)

2. Recordkeeping~~Pumps in Light Liquid Service~~

a. The permittee shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. If an instrument program is implemented for leak inspections, the record shall contain a full description of the program.

b. The permittee shall record in a log book for each leak that is detected the following information:

~~a. The Each pump in light liquid service at the LPG Refrigeration System, Liquid Fuel System, and Blending and Shipping Area shall be monitored **monthly** to detect leaks in accordance with the requirements set forth in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-2(d), (e) and (f).~~

~~b. Each pump in light liquid service at the LPG Refrigeration System, Liquid Fuel System, and Blending and Shipping Area shall be checked by visual inspection **each calendar week** for indications of liquids dripping from the pump seal.~~

~~c. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.~~

~~d. If there are indications of liquids dripping from the pump seal, a leak is detected.~~

~~e. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** *after it is detected*, except as provided in Special Condition No. C.7 of this attachment. A first attempt at repair shall be made **no later than five (5) calendar days** *after each leak is detected*.~~

~~f. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Special Condition No. D.2.a of this attachment provided the requirements of 40 CFR §60.482-2(d)(1) through (6) are met.~~

~~g. Any pump that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Special Condition Nos. D.2.a, D.2.b, D.2.e, and D.2.f of this attachment if the pump:~~

~~i. Has no externally actuated shaft penetrating the pump housing;~~

~~ii. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c); and~~

~~iii. Is tested for compliance with Special Condition No. D.2.g.ii of this attachment initially upon designation, annually, and at other times requested by the Department.~~

i. ~~h. If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from the requirements of Special Condition Nos. D.2.a through D.2.g of this attachment~~equipment type and identification number;

The nature of the leak (i.e., vapor or liquid) and ,

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

~~3. Compressors~~

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

b. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** *after it is detected*, except as provided in Special Condition No. C.7 of this attachment. A first attempt at repair shall be made **no later than five (5) calendar days** *after each leak is detected*.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)[1]

4. Pressure Relief Devices in Gas/Vapor Service

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)[1]

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

a. Each valve in light liquid service at the LPG Refrigeration System, Liquid Fuel System, and Blending and Shipping Area shall be monitored **monthly** to detect leaks in accordance with the requirements set forth in 40 CFR §60.485(b).
b. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
c. Any valve for which a leak is *not detected for two (2) successive months* may be monitored the **first month of every quarter**, beginning with the next quarter, *until a leak is detected. If a leak is detected*, the valve shall be monitored **monthly** until a leak *is not detected for two (2) successive months.*
d. *When a leak is detected*, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** *after it is detected*, except as provided in Special Condition No. C.7 of this attachment. A first attempt at repair shall be made **no later than five (5) calendar days** *after each leak is detected*.
e. First attempts at repair include, but are not limited to, the following best practices where practicable:

i. Tightening of bonnet bolts;
ii. Replacement of bonnet bolts;
iii. Tightening of packing gland nuts; and
iv. Injection of lubricant into lubricated packing.

f. Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Special Condition No. D.5.a of this attachment if the valve:

i. Has no external actuating mechanism in contact with the process fluid;
ii. Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485(c); and

iii. Is tested for compliance with the Special Condition No. D.5.f.ii of this attachment initially upon designation, annually, and at other times requested by the Department.

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]

6. Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and other Connectors

i.ii. a. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors at the LPG Refrigeration System, Liquid Fuel System, and Blending and Shipping Area shall be monitored **within five (5) days** by the method specified in 40 CFR §60.485(b) *if evidence of a potential leak is found by visual, audible, olfactory, or any other* of detection *method.*(i.e., sight, sound, or smell);
b. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
c. *When a leak is detected*, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** *after it is detected*, except as provided in Special Condition No. C.7 of this attachment. The first attempt at repair shall be made **no later than five (5) calendar days** *after each leak is detected.*
d. First attempts at repair include, but are not limited to, the best practices described in Special Condition No. D.5.e of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

~~9. *When each leak is detected*, the following information shall be recorded in a log and shall be kept for two (2) years in a readily accessible location:~~

~~a. The instrument and operator identification numbers and the equipment identification number;~~
~~ii.~~iii. ~~b.~~ The date the leak was detected and the ~~dates~~date of each attempt to repair the leak;
~~iii.~~iv. ~~c.~~ Repair methods applied in each attempt to repair the leak;
~~d. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm;~~
~~iv.~~v. ~~e. "~~"Repair delayed~~"~~" and the reason for the delay if athe leak is not repaired within fifteen (15) calendar days after discovery of the leak;
~~f. The signature of the permittee whose decision it was that repair could not be effected without a process shutdown;~~
~~v.~~vi. ~~g.~~ The expected date of successful repair of the leak if athe leak is not repaired within fifteen (15) days;
~~fifteen (15) days;~~
~~h. Dates of process unit shutdown that occur while the equipment is unrepaired; and~~
~~vi.~~vii. ~~i.~~ The date of successful repair of the leak~~.~~; and
viii. Inspector's name and signature.

(Auth~~.~~: HAR §11-60.1-3, §11-60.1-81, §11-60.1-90~~, §11-60.1-161,~~; 40 CFR §~~60.592, §63.648)[1]~~11094)

~~10. The following information pertaining to all equipment subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, shall be recorded in a log that is kept in a readily accessible location:~~

~~a. A list of identification numbers for all equipment;~~
~~b. A list of identification numbers for equipment that are designated for no detectable emissions which is signed by the permittee;~~
~~c. A list of equipment identification numbers for pressure relief devices required to comply with the requirements of Special Condition No. C.4 of this attachment;~~
~~d. The dates of each compliance test used to determine no detectable emissions:~~

~~i. The background level measured during each compliance test; and~~

~~ii. The maximum instrument reading measured at the equipment during each compliance test.~~

~~e. A list of identification numbers for equipment in vacuum service.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

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

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

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

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

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[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 Form: Terminal Equipment - Process Rate** or equivalent form, shall be used in reporting fugitive emissions.

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

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

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

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

    d. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

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

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

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

4. Compliance Certification

    a. During the permit term, the permittee shall submit at least **annually** to the Department 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:

        i. The identification of each term or condition of the permit that is the basis of the certification;
        ii. The compliance status;
        iii. Whether compliance was continuous or intermittent;
        iv. The methods used for determining the compliance status of the source currently and over the reporting period;
        v. 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;

vi. 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 exceedance as defined in 40 CFR Part 64 occurred; and

vii. Any additional information as required by the Department including information to determine compliance.

b. 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.

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

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

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

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

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

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

~~i. Number of valves for which leaks were detected;~~
~~ii. Number of valves for which leaks were not repaired;~~
~~iii. Number of pumps for which leaks were detected;~~

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

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

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)[1]~~

Section F. Agency Notifications

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

[1]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.

[2]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.

ATTACHMENT IIB: SPECIAL CONDITIONS
PETROLEUM STORAGE TANKS
COVERED SOURCE PERMIT NO. 0863-01-C

~~Issuance~~Amended Date: ~~November 16, 2018~~August 6, 2020 **Expiration Date: November 15, 2023**

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

Section A. Equipment Description

1. This portion of the CSP encompasses the following equipment and associated appurtenances:

a. ~~Twenty-Four (24~~Eighteen (18) Gasoline Intermediates and Finished Products Storage Tanks

i. One (1) - 304,640 bbl external floating roof storage tank identified as Tank 111;
ii. One (1) - 19,200 bbl external floating roof storage ~~tanks~~tank identified as Tank 232;
iii. Two (2) - 19,000 bbl external floating roof storage tanks identified as Tanks 233 and 273;
iv. Four (4) - 38,000 bbl external floating roof storage tanks identified as Tanks 236, 237, 255, and 256;
~~v. One (1) - 9,500 bbl external floating roof storage tanks identified as Tank 251;~~
;
vi. One (1) - 37,000 bbl external floating roof storage tank identified as Tank 252;
vii. One (1) - 37,400 bbl external floating roof storage tank identified as Tank 253;
viii. One (1) - 33,000 bbl external floating roof storage tank identified as Tank 254;
ix. Three (3) - 29,000 bbl external floating roof storage tanks identified as Tanks 257, 258, and 262;
x. ~~Three (3~~One (1) - 41,000 bbl external floating roof storage tanks identified as ~~Tanks 264, 265, and~~Tank 266;
xi. One (1) - 23,000 bbl external floating roof storage tank identified as Tank 269;
xii. One (1) - 36,000 bbl external floating roof storage tank identified as Tank 271;
~~xiii. One (1) - 263,200 bbl external floating roof storage tank identified as Tank 109;~~
~~xiv. One (1) - 9,500 bbl external floating roof storage tank converted to an internal floating roof storage tank identified as Tank 249; and~~
~~xv. Two (2) - 5~~
xv. One (1) - 5,000 bbl external floating roof storage tank converted to internal floating roof storage tanks ~~converted to internal floating roof storage tanks~~ identified as ~~Tanks 250 and~~Tank 275.

b. ~~Six (6~~Five (5) Crude Oil Storage Tanks

i. ~~One (1) - 149,000 bbl external floating roof storage tank identified as Tank 104;~~
~~ii.~~ One (1) - 265,440 bbl external floating roof storage tank identified as Tank 105;
~~iii~~ii. One (1) - 263,200 bbl external floating roof storage tank identified as Tank 106;

~~iv. One (1) - 237,000 bbl external floating roof storage tank identified as Tank 107;~~
~~v~~iii. One (1) - 235,000 bbl external floating roof storage tank identified as Tank 108;
~~and~~iv. One (1) - 263,200 bbl external floating roof storage tank identified as Tank 109;
~~vi~~ and
v. One (1) - 304,640 bbl external floating roof storage tank identified as Tank 110.

c. Three (3) Jet Fuel Storage Tanks

~~i. One (1) - 50,827~~Three (3) - 99,000 bbl vertical fixed roof storage ~~tank~~tanks identified as ~~Tank 274;~~
~~i. ii. One (1) - 38,000 bbl external floating roof storage tank identified as Tank 263;~~Tanks 155, 158, and 161;
~~iii. One (1) - 41,000 bbl external floating roof storage tank identified as Tank 267.~~
~~ii.~~i.

d. ~~Five (5~~Four (4) Crude Water Draw, Recovered Oil, and Transmix Storage Tanks

i. One (1) - 23,000 bbl external floating roof storage tank identified as Tank 113;
ii. Two (2) - 4,700 bbl external floating roof storage ~~tank~~tanks identified as Tanks 162 and 163; and
iii. One (1) - 19,200 bbl external floating roof storage tank identified as Tank 235; and
~~iv. One (1) - 149,000 bbl external floating roof storage tank identified as Tank 104.~~

(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. number and manufacturer of each tank.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

~~1. Each of the~~
1. Gasoline intermediates and finished products storage tanks ~~identified in Section A of this attachment~~ are subject to the provisions of the following federal regulations when storing gasoline:

~~a.~~ 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants ~~for Source Categories (MACT):~~

a. ~~i.~~ (NESHAP), Subpart A~~,~~ – General Provisions~~; and~~.
~~ii.~~ 40 CFR Part 63, NESHAP, Subpart ~~CC~~BBBBBB, National Emission Standards for Hazardous Air Pollutants ~~from Petroleum Refineries.~~

b. ~~For Group 1 storage tanks (all storage tanks except for storage tanks 263, 267~~for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and ~~274), 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~~ Pipeline Facilities.

~~August 18, 2005, whichever comes first. 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 (storage tanks 263, 267, and 274) shall comply with Sections C through F below.~~

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-~~174~~161; 40 CFR §60.2, §63.~~640~~11081)[1]

~~2. Storage tanks 104, 113, 162, 163, and 235 are subject to the following federal requirements:~~

~~a. 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP):~~

~~i. Subpart A, General Provisions; and~~
~~ii. Subpart FF, National Emission Standard for Benzene Waste Operations.~~

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, §11-60.180; 40 CFR §61.01, §61.340)[1]

Section C. Operational and Emissions Limitations

1. The true vapor pressure of the volatile organic liquid (VOL) stored in each of the storage tanks identified in Special Condition A.1.a of this attachment shall not be greater than or equal to 11.0 pounds per square inch absolute (psia).

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

2. The true vapor pressure of the ~~volatile organic liquid~~VOL stored in ~~storage tank~~Storage Tanks 155, 158, and 161 shall not be greater than or equal to 1.5 pounds per square inch absolute (psia).

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

3. Storage tanks identified in Special Condition No. A.1.b of this attachment shall only store crude oil or lower volatility products.

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

4. Storage tanks identified in Special Condition No. A.1.c of this attachment shall only store jet fuel or lower volatility products.

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

5. Each storage tank identified in Section A of this attachment, except for ~~storage tank~~Storage Tanks 155, 158, and 161 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 seals to close the space between the roof edge and tank wall.

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

6. All tank gauging and sampling devices for each of the storage tanks identified in Section A of this attachment, except for ~~storage tank~~Storage Tanks 155, 158, and 161 shall be gas-tight except when tank gauging or sampling is taking place.

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

7. Each storage tank identified in Section A of this attachment shall be equipped with a permanent submerged fill pipe.

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

~~8. The permittee may increase the storage capacities of storage tanks 105 through 111 by twelve (12) percent to the capacities listed below, provided that no new applicable requirement is triggered by such action and the permittee has installed the seal~~

~~requirements pursuant to 40 CFR Part 63, Subpart CC. The permittee must obtain prior written approval of the Department and must demonstrate that a modification or reconstruction under NSPS or a PSD review would not be triggered.~~

~~Storage tank 107 - 265,440 bbl~~
~~Storage tank 108 - 263,200 bbl~~

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

Section D. Monitoring and Recordkeeping Requirements

1. The permittee shall maintain a record of the ~~volatile organic liquid~~VOL stored, the period of storage, and the maximum true vapor pressure (psia) of that liquid for each storage tank identified in ~~Section A of this attachment.~~
   Section A of this attachment.

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

~~2~~

2. Initial Inspection (finished products storage tanks)

After installing the control equipment required to meet Attachment IIC, Special Condition Nos. C.5 and C.6 for storing gasoline, the permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to the initial filling of the storage tank with gasoline. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage tank.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §63.11092)

3. Annual Inspection (finished products storage tanks)

a. For storage tanks equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall visually inspect the internal floating roof, the primary seal, and the 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 gasoline 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 by this condition cannot be repaired within forty-five (45) days and if the tank cannot be emptied within forty-five (45) days, a thirty-day (30-day) extension may be requested from the Department in the annual inspection report required by Attachment IIB, Special Condition No. E.2.b. 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 storage tank will be emptied as soon as possible.

b. For storage tanks equipped with a double-seal system as specified in Attachment IIB, Special Condition No. C.3.b, the permittee shall:

i. Visually inspect the storage tank at least once every twelve (12) months after initial fill as specified in Attachment IIB, Special Condition No. D.3.a; or

ii. Visually inspect the storage tank as specified in Attachment IIB, Special Condition No. D.4 at least every five (5) years.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §63.11092)

4. Inspection after Tank Emptied and Degassed (finished products storage tanks)

The permittee shall 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. If the internal 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, 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 Attachment IIB, Special Condition No. D.4 exist before refilling the storage tank with gasoline. In no event shall inspections conducted in accordance with this permit condition occur at intervals greater than ten (10) years in the case of tanks conducting the annual visual inspection as specified in Attachment IIB, Special Condition Nos. D.3.a and D.3.b.i and at intervals no greater than five (5) years in the case of tanks specified in Attachment IIB, Special Condition Nos. D.3.b.ii.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §63.11092)

5. Tank Records

a. The permittee shall keep ~~readily accessible~~a record of each inspection performed as required by Attachment IIB, Special Condition Nos. D.2, D.3, and D.4. Each record shall identify the storage tank on which the inspection was performed and shall contain the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

b. For each storage tank, records shall be maintained on the type of VOL stored, the period of storage, and the maximum true vapor pressure (in psia) of VOL during the respective storage period. Available data on storage temperature may be used to determine the maximum true vapor pressure in accordance with 40 CFR §60.116b(e) as follows:

i. For tanks operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products, available data on the Reid vapor pressure and the maximum expected storage temperature (based on the highest expected calendar-month average temperature) of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in the American Petroleum Institute Bulletin 2517 (incorporated by reference – see §60.17), unless the Department specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

iii. For other liquids, the vapor pressure may be obtained from standard reference texts, or determined by ASTM D2879-83, 96, or 97 (incorporated by reference – see §60.17), or measured by an appropriate method approved by the Department, or calculated by an appropriate method approved by the Department.

c. A tank gauging system shall be operated and maintained for each storage tank to determine the annual throughput of product for purposes of annual emissions reporting. Records shall be maintained on the annual throughput for each VOL stored inside the storage tanks.

d. Records showing the dimensions (feet) 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~~ each storage tank shall be maintained for the life of each tank.

~~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.:~~
(Auth.: HAR §11-60.1-3, §11-60.1-~~5, §11-60.1-11, §11-60.1-~~90~~;~~ §11-60.1-161, 40 CFR §63.11094, §63.~~646, §63.654)~~[1] 11095)

~~3.~~6. Malfunctions

The permittee shall ~~comply with the recordkeeping requirements in 40 CFR §60.115b for storage tanks 104, 113, 162, 163, and 235.~~keep the following records for malfunctions:

~~(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180; 40 CFR §61.356)[1]~~

~~4. The permittee shall maintain records that identify each waste stream at~~

a. Records of the ~~Kapolei Terminal subject to 40 CFR Part 61, Subpart FF,~~occurrence and ~~indicate whether~~duration of each malfunction of operation (i.e., process equipment) or ~~not~~ the ~~waste stream is controlled for benzene~~air pollution control or monitoring equipment.

b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR ~~Part 61, Subpart FF. In addition, the permittee shall maintain the following records:~~§63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

~~a. For each waste stream not controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF, the records shall include all tests results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste~~

~~stream is process waste stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.~~

~~b. For each waste stream exempt from 40 CFR §61.342(c)(1) in accordance with 40 CFR §61.342(c)(3), the records shall include:~~

~~i. All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr in accordance with 40 CFR §61.342(c)(3)(i), or~~

~~ii. All measurements, calculations and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr in accordance with 40 CFR §61.342(c)(3)(ii).~~

~~(Auth.: HAR §11-60.1-3, 11-60.1-90,~~(Auth.: HAR §11-60.1-~~180~~3, §11-60.1-90, §11-60.1-161; 40 CFR §~~61.356~~)[1]63.11094)

~~5~~7. 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 or their representatives upon request.

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

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

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

4. Compliance Certification

   a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. ~~EPA~~Environmental Protection Agency, 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:

      i. The identification of each term or condition of the permit that is the basis of the certification;
      ii. The compliance status;
      iii. Whether compliance was continuous or intermittent;
      iv. The methods used for determining the compliance status of the source currently and over the reporting period;

v. 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;
vi. 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 exceedance as defined in 40 CFR Part 64 occurred; and

vii. Any additional information as required by the Department including information to determine compliance.

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

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

5. The permittee shall notify the Department at least **thirty (30) days** or such lesser time as designated and approved by the Department, prior to~~:~~ changing the VOL stored in any of the storage tanks identified in Section A.1.a of this attachment.

~~a. Changing the volatile organic liquid stored in any of the storage tanks identified in Section A.1.a of this attachment; and~~
~~b. Increasing the storage capacity of storage tanks 107 and 108 in accordance with Special Condition No. C.8 of this attachment.~~

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

~~6~~

8. The permittee shall ~~submit to the Department the following report within ninety (90) days after January 7, 1993, a report that summarizes the regulatory status of each waste stream at the Kapolei Terminal subject to 40 CFR §61.342 and is determined by the procedures specified in 40 CFR §61.355(c) to contain benzene. The report shall include the following information:~~

~~a. Total annual benzene quantity from the Kapolei Terminal waste determined in accordance with 40 CFR §61.355(a);~~
~~b. A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF.~~

~~c. For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the following information shall be added to the table:~~

~~i. Whether or not the water content of the waste stream is greater than ten (10) percent;~~
~~ii. Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;~~
~~iii. Annual waste quantity for the waste stream;~~
~~iv. Range of benzene concentrations for the waste stream;~~
~~v. Annual average flow-weighted benzene concentration for the waste stream; and~~
~~vi. Annual benzene quantity for the waste stream.~~

~~d. The information required in Special Condition Nos. E.6.a, E.6.b, and E.6.c of this attachment should represent the waste stream characteristics based on current configuration and operating conditions. The permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR §61.10(a).~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-180, 40 CFR §61.357)[1]~~

~~7. If the total annual benzene quantity from the Kapolei Terminal waste is equal to or greater than 10 Mg/yr, then the permittee shall submit to the Department the following reports:~~

~~a. Within ninety (90) days after January 7, 1993, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with 40 CFR Part 61, Subpart FF.~~
~~b. Beginning on the date that the equipment necessary to comply with these standards have been certified in accordance with Special Condition No. E.7.a of this attachment, the permittee shall submit **annually** to the Department a report that updates the information listed in Special Condition Nos. E.6.a, E.6.b, and E.6.c of this attachment. If the information in the annual report is not changed in the following year, the permittee may submit a statement to that effect.~~
~~c. Beginning three (3) months after the date that the equipment necessary to comply with these standards has been certified in accordance with Special Condition No. E.7.a of this attachment, the permittee shall submit **quarterly** to the Department a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR Part 61, Subpart FF.~~

~~d. Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with Special Condition No. E.7.a of this attachment, the permittee shall submit annually to the Department a report that summarizes all inspections required by 40 CFR Part 61, Subpart FF during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-180, 40 CFR §61.357)[1]~~

~~8. The permittee shall~~ comply with the reporting requirements in 40 CFR §60.115b for ~~storage tanks 104,~~Storage Tanks 113, 162, 163, and 235.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180; 40 CFR §61.357)[1]

~~Section F. Test Methods and Procedures.~~

~~1. The permittee shall test equipment for compliance with no detectable emissions in accordance with the following requirements:~~

~~a. Monitoring shall comply with Method 21 from Appendix A of 40 CFR Part 60.~~
~~b. The detection instrument shall meet the performance criteria of Method 21.~~
~~c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.~~
~~d. Calibration gases shall be:~~

~~i. Zero air (less than 10 ppm of hydrocarbon in air); and~~
~~ii. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.~~

~~e. The background level shall be determined as set forth in Method 21.~~
~~f. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface described in Method 21.~~
~~g. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.~~

~~(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, §11-60.1-180, 40 CFR §60.696, §61.355)[1]~~

Section G. Agency Notifications

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

~~Section H. 40 CFR Part 63, Subpart CC Requirements~~

~~1. Operational and Emission Limitations~~

~~a. Group 1 storage tanks consisting of an external floating roof converted to an internal floating roof (petroleum storage tanks 249, 250, and 275) shall comply with the provisions of 40 CFR §63.646 including the following:~~

~~i. The internal floating roof shall rest or float on the liquid surface inside a storage tank 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 tank is completely emptied and degassed or subsequently emptied and refilled. When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.~~

~~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. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.~~

~~iv. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seals exceeds the manufacturer's recommended setting.~~

v. ~~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.~~

b. ~~Group 1 storage tanks with an external floating roof (petroleum storage tanks 104, 105, 106, 107, 108, 109, 110, 111, 113, 162, 163, 232, 233, 235, 236, 237, 251, 252, 253, 254, 255, 256, 257, 258, 262, 264, 265, 266, 269, 271, and 273) shall comply with the provisions of 40 CFR §63.646 including 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 during the inspections required by Special Condition No. H.2.b of this attachment.~~
ii. ~~The floating roof is to be floating on the liquid at all times (i.e., off the roof leg supports), except during initial fill until the floating roof is lifted off leg supports and during those intervals when the storage tank is completely emptied and degassed or when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the floating roof is resting on the leg supports shall be continuous and shall be accomplished as soon as practical.~~
iii. ~~If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.~~
iv. ~~Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seals exceeds the manufacturer's recommended setting.~~
v. ~~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.~~

~~(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 consisting of an external floating roof converted to an internal floating roof (petroleum storage tanks 249, 250, and 275), 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.1 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.1 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.1 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.1 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.1 of this attachment.~~

~~ii. If during the inspections required by Special Condition Nos. H.2.a.i.(1)(a) or H.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. H.2.a.i.(1)(a) or H.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. H.2.a.iv of this attachment, for all the inspections required by Special Condition Nos. H.2.a.i.(1)(b), H.2.a.i.(2)(a), and H.2.a.i.(2)(c) of this attachment, the permittee shall notify the Department in writing at least **thirty (30) calendar days** prior to the refilling of each storage tank to afford the Department the opportunity to have an observer present.~~

~~iv. If the inspections required by Special Condition Nos. H.2.a.i.(1)(b), H.2.a.i.(2)(a), and H.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 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 at least **seven (7) calendar days** prior to refilling.~~

~~v. If during the inspections required by Special Condition Nos. H.2.a.i.(1)(b), H.2.a.i.(2)(a), and H.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 104, 105, 106, 107, 108, 109, 110, 111, 113, 162, 163, 232, 233, 235, 236, 237, 251, 252, 253, 254, 255, 256, 257, 258, 262, 264, 265, 266, 269, 271, and 273), 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. H.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. H.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.~~
~~(3) The total surface area of each gap described in Special Condition No. H.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. H.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. H.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. H.2.b.i of this attachment or to inspect the tank to determine compliance with Special Condition No. H.2.b.v and H.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. H.2.b.iii, H.2.b.iv, H.2.b.v and H.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. H.2.b.i of this attachment or during inspections necessary to determine compliance with Special Condition Nos. H.2.b.v and H.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 in writing **thirty (30) calendar days** in advance of any gap measurements to afford the Department 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 in writing at least **thirty (30) calendar days** prior to filling or refilling each storage tank with organic HAP to afford the Department 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 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 at least **seven (7) calendar days** prior to the refilling.~~

~~c. For Group 1 storage tanks consisting of an external floating roof converted to an internal floating roof (petroleum storage tanks 249, 250, and 275):~~

~~i. The permittee shall keep a record that each inspection required by Special Condition No. H.2.a of this attachment was performed.~~

~~d. For Group 1 storage tanks with external floating roofs (petroleum storage tanks 104, 105, 106, 107, 108, 109, 110, 111, 113, 162, 163, 232, 233, 235, 236, 237, 251, 252, 253, 254, 255, 256, 257, 258, 262, 264, 265, 266, 269, 271, and 273):~~

~~i. The permittee shall keep records describing the results of the seal gap measurements made in accordance with Special Condition No. H.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. H.2.b.iii and H.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. 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 consisting of an external floating roof converted to an internal floating roof (petroleum storage tanks 249, 250, and 275):~~

~~(1) Results of each inspection conducted in accordance with Special Condition No. H.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. H.2.a.i.(1)(a) and H.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. H.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. H.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. H.2.a.i.(1)(b), H.2.a.i.(2)(a), or H.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 (ten) 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 104, 105, 106, 107, 108, 109, 110, 111, 113, 162, 163, 232, 233, 235, 236, 237, 251, 252, 253, 254, 255, 256, 257, 258, 262, 264, 265, 266, 269, 271, and 273):~~

~~(1) Documentation of the results of each seal gap measurement made in accordance with Special Condition No. H.2.b of this attachment in which the seal and seal gap requirements of Special Condition Nos. H.2.b.iii, H.2.b.iv, H.2.b.v, or H.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. H.2.b.iii and H.2.b.iv of this attachment;~~
~~(c) A description of any seal condition specified in Special Condition Nos. H.2.b.v or H.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. H.2.b.vii or H.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. H.2.b.vii or H.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. H.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]

---

[1]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.

[2]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.

ATTACHMENT IIC: SPECIAL CONDITIONS
PETROLEUM TRUCK LOADING RACK
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

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 CSP encompasses the following equipment and associated appurtenances:

   a. Petroleum Truck Loading Rack

   (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 number 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 petroleum truck loading rack is 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. ~~i.~~ Subpart A, General Provisions; and
      j. ~~ii.~~ 40 CFR Part 63, NESHAP, Subpart ~~CC~~BBBBBB, National Emission Standards for Hazardous Air Pollutants ~~from Petroleum Refineries.~~ for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

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

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174, 40 CFR §63.~~640, §63.650~~11081)[1]

Section C. Operational and Emission Limitations

1. The permittee shall comply with the standards specified in Table 2 to 40 CFR Part 63, Subpart BBBBBB. Gallons per day are calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365.

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-174, 40 CFR §63.11083, §63.11088)[1]

2. The maximum throughput of motor gasoline (for the purposes of this limit, "motor gasoline" includes blended ethanol, motor gasoline, and naphtha) at the petroleum truck loading rack shall not exceed ~~75,700 liters per day of gasoline (includes motor gasoline and aviation gasoline) to be classified as a *Group 2 gasoline loading rack*.~~

   ~~(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174, 40 CFR §63.640, §63.650)[1]~~

~~2. If the maximum throughput of the petroleum truck loading rack exceeds 75,700 liters per day of gasoline (includes motor gasoline and aviation gasoline), the loadrack shall be classified as a *Group 1 gasoline load rack*. Group 1 gasoline loading racks shall comply with the provisions of 40 CFR Part 63, Subpart R, §63.421, §63.422 (a) through (c), §63.425 (a) through (c), §63.425 (e) through (h), §63.427 (a) and (b), and §63.428 (b), (c), (g)(1), and (h)(1) through (h)(3). This includes the installation and operation of a vapor collection and processing equipment such that the emissions to the atmosphere due to the loading of gasoline tank trucks do not exceed 10 mg of total organic compounds (TOC) per liter of gasoline loaded. The permittee shall submit a description of the vapor collection and processing equipment with emission rates and ambient air impacts, if any, to the Department for approval at least **sixty (60) days** before installation of the equipment. In addition, the maximum throughput of the petroleum truck loading rack shall not exceed the following limits:~~

~~a. Motor Gasoline: 7,300~~1,679,000 barrels per any rolling twelve (12) month period;
~~b. Aviation Gasoline: 47,450 barrels per any rolling twelve (12) month period;~~
~~c. Diesel: 2,920,000 barrels per any rolling twelve (12) month period; and~~
~~d. Jet fuel: 4,380,000 barrels per any rolling twelve (12) month period.~~

(Auth.: ~~HAR~~ §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-~~174, 40 CFR §63.640, §63.650)[1]~~93)

Section D. Monitoring and Recordkeeping Requirements

1. The permittee shall operate and maintain a non-resetting flow meter to monitor the throughput of motor gasoline, aviation gasoline, diesel, and jet fuel from the petroleum truck

loading rack. Records of throughputs for each product shall be maintained on a **daily, monthly and rolling twelve (12) month basis.**

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP §11-60-15)[2]

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

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP §11-60-15)[2]

3. Monthly Leak Inspections

   At least monthly, the bottom loading load rack shall be inspected during the loading of gasoline tank trucks for total organic compound liquid or vapor leaks in accordance with Attachment IIA, Special Condition No. C.1.a of this permit. Each detection of a leak shall be documented in accordance with Attachment IIA, Special Condition No. D.2 and the source of the leak repaired in accordance with Attachment IIA, Special Condition No. C.1.b.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, and §11-60.1-174, 40 CFR §63.11089; SIP §11-60-15)[1,2]

4. Malfunctions

   The permittee shall keep the following records for malfunctions:

   a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
   b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.11085(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §63.11094)[1]

6. The permittee shall make records available within twenty-four (24) hours of a request by the Department to document the load rack's average daily gasoline throughput.

(Auth.: HAR §11-60.1-3, §11.60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §63.11088)[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 **annually** 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: Terminal Equipment – Process Rate** or an equivalent form, shall be used in reporting emissions.

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

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

2. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Conditions 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)

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

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

4. Compliance Certification

   a. During the permit term, the permittee shall submit at least **annually** to the Department 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:

      i. The identification of each term or condition of the permit that is the basis of the certification;
      ii. The compliance status;
      iii. Whether compliance was continuous or intermittent;
      iv. The methods used for determining the compliance status of the source currently and over the reporting period;
      v. 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;
      vi. 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 exceedance as defined in 40 CFR Part 64 occurred; and
      vii. Any additional information as required by the Department including information to determine compliance.

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

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

5. The permittee shall submit **semi-annually** the following written reports to the Department. 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. Throughputs of motor gasoline, aviation gasoline, diesel and jet fuel on a monthly and rolling twelve (12) month basis. The enclosed **Monitoring Report Form: Petroleum Truck Load Rack** shall be used in reporting.
   b. Deviations from permit requirements shall be clearly identified and addressed in these reports.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section F. Agency Notifications

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

[1]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.

[2]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.

ATTACHMENT II – INSIG: SPECIAL CONDITIONS
INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

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

This attachment encompasses insignificant activities listed in HAR, §11-60.1-82(f) and (g) for which provisions of this permit and HAR, Subchapter 2, General Prohibitions, apply.

(Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

1. The permittee shall take measures to operate applicable insignificant activities in accordance with the provisions of HAR, Subchapter 2 for visible emissions, fugitive dust, incineration, process industries, sulfur oxides from fuel combustion, storage of volatile organic compounds, volatile organic compound water separation, pump and compressor requirements, and waste gas disposal.

   (Auth.: HAR §11-60.1-3, §11-60.1-82, §11-60.1-90)

2. The Department may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-82, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. The Department reserves the right to require monitoring, recordkeeping, or testing of any insignificant activity to determine compliance with the applicable requirements.

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

2. All records shall be maintained for at least **five (5) years** from the date of any required monitoring, recordkeeping, testing, or reporting. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department or its authorized representative upon request.

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

Section D. Notification and Reporting

Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department 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:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source currently and over the reporting period;
5. 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;
6. 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 Part 64 occurred; and
7. Any additional information as required by the Department 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 determines that reasonable justification exists for the extension.

In lieu of addressing each emission unit as specified in **Compliance Certification Form**, the permittee may address insignificant activities as a single unit provided compliance is met with all applicable requirements. If compliance is not totally attained, the permittee shall identify the specific insignificant activity and provide the details associated with the noncompliance.

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

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1.

1. Annual fees shall be paid in full:

   a. Within **one-hundred twenty (120) days** after the end of each calendar year; and
   b. Within **thirty (30) days** after the permanent discontinuance of the covered source.

2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.

3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and be submitted on forms furnished by the Department.

4. The annual fees and the emission data shall be mailed to:

State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, HI 96782

ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department the nature and amounts of emissions.

1. Complete the attached forms:

   Annual Emissions Report Form: External/Internal Floating Roof Petroleum Storage Tank
   Annual Emissions Report Form: Fixed Roof Petroleum Storage Tank
   Annual Emissions Report Form: Terminal Equipment – Process Rate

2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department within **sixty (60) days** after the end of each calendar year and shall be mailed to the following address:

   State of Hawaii
   Clean Air Branch
   2827 Waimano Home Road, #130
   Pearl City, HI 96782

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department upon request.

4. Any information submitted to the Department without a request for confidentiality shall be considered public record.

5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information, including information concerning secret processes or methods of manufacture, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
PAGE 1 OF ___

Issuance Date: November 16, 2018 **Expiration Date:** November 15, 2023

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as requested by the Department of Health.

(Make Copies of the Compliance Certification Form for Future Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE 2 OF ___)

Issuance Date: November 16, 2018 **Expiration Date:** November 15, 2023

The purpose of this form is to evaluate whether or not the facility was in compliance with the permit terms and conditions during the covered period. If there were any deviations to the permit terms and conditions during the covered period, the deviation(s) shall be certified as *intermittent compliance* for the particular permit term(s) or condition(s). Deviations include failure to monitor, record, report, or collect the minimum data required by the permit to show compliance. In the absence of any deviation, the particular permit term(s) or condition(s) may be certified as *continuous compliance*.

Instructions:

Please certify Sections A, B, and C below for continuous or intermittent compliance. Sections A and B are to be certified as a group of permit conditions. Section C shall be certified individually for each operational and emissions limit condition as listed in the Special Conditions section of the permit (list all applicable equipment for each condition). Any deviations shall also be listed individually and described in Section D. The facility may substitute its own generated form in verbatim for Sections C and D.

A. Attachment I, Standard Conditions

Permit term/condition	Equipment	Compliance
All standard conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent

B. Special Conditions - Monitoring, Recordkeeping, Reporting, Testing, and INSIG

Permit term/condition	Equipment	Compliance
All monitoring conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
Permit term/condition All recordkeeping conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All reporting conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All testing conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent
Permit term/condition All INSIG conditions	Equipment All Equipment listed in the permit	Compliance ☐ Continuous ☐ Intermittent

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE ____ OF ___)

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

C. Special Conditions - Operational and Emissions Limitations

Each permit term/condition shall be identified in chronological order using attachment and section numbers (e.g., Attachment II, B.1, Attachment IIA, Special Condition No. B.1.f, etc.). Each equipment shall be identified using the description stated in Section A of the Special Conditions (e.g., unit no., model no., serial no., etc.). Check all methods (as required by permit) used to determine the compliance status of the respective permit term/condition.

Permit term/condition	Equipment	Method	Compliance
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing	☐ Continuous ☐ Intermittent

(Make Additional Copies if Needed)

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE ___ OF ___)

Issuance Date: November 16, 2018 **Expiration Date:** November 15, 2023

D. Deviations

Permit Term/ Condition	Equipment / Brief Summary of Deviation*	Deviation Period time (am/pm) & date (mo/day/yr)	Date of Written Deviation Report to DOH (mo/day/yr)
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	
		Beginning: Ending:	

*Identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred.

(Make Additional Copies if Needed)

ANNUAL EMISSIONS REPORT FORM
EXTERNAL/INTERNAL FLOATING ROOF PETROLEUM STORAGE TANK
COVERED SOURCE PERMIT NO. 0863-01-C
PAGE 1 OF 2

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period:_____ Date:_____

Facility Name: _____

Equipment Location:_____

Responsible Official (PRINT):_____

TITLE:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record.

Responsible Official (Signature):_____

TANK	NUMBER					
	CAPACITY (bbl)					
	DIAMETER (ft) - **D**					
	COLOR					
	TYPE OF DECK [1]					
	NUMBER OF COLUMNS (DIMENSIONLESS) -**Nc**					
	TYPE OF RIM SEAL[2]					
	TOTAL NUMBER OF DIFFERENT TYPE DECK FITTINGS[3] (DIMENSIONLESS) - n_f					
PRODUCT	NAME					
	REID VAPOR PRESSURE (psi)					
	TRUE VAPOR PRESSURE (psia) - P_{VA}					
	STORAGE TEMP. (°F)					
ANNUAL THROUGHPUT (bbl/yr) - **Q**						

ANNUAL EMISSIONS REPORT FORM
EXTERNAL/INTERNAL FLOATING ROOF PETROLEUM STORAGE TANK
COVERED SOURCE PERMIT NO. 0863-01-C
(CONTINUED, PAGE 2 OF 2)

Issuance Date: November 16, 2018 **Expiration Date: November 16, 2018**

[1] Type A: Column-supported fixed roof with bolted deck
Type B: Column-supported fixed roof with welded deck
Type C: Self-supporting fixed roof with bolted deck
Type D: Self-supporting fixed roof with welded deck

[2] Type VMP: Vapor-mounted resilient foam-filled primary seal only
Type LMP: Liquid-mounted resilient foam-filled primary seal only
Type LFP: Liquid-filled primary seal only
Type MSP: Mechanical shoe primary seal only
Type VMPS: Vapor-mounted resilient foam-filled primary seal plus secondary seal
Type LMPS: Liquid-mounted resilient foam-filled primary seal plus secondary seal
Type LFPS: Liquid-filled primary seal plus secondary seal
Type MSPSS: Mechanical shoe primary seal plus secondary seal (shoe mounted)
Type MSPSR: Mechanical shoe primary seal plus secondary seal (rim mounted)

[3] For each tank, provide a listing of each type of deck fitting and the corresponding quantity of each fitting. [See Table 7.1-12, AP-42, Section 7.1(2/96)]

ANNUAL EMISSIONS REPORT FORM
FIXED ROOF PETROLEUM STORAGE TANK
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period:_____ Date:_____

Facility Name:_____

Equipment Location:_____

Responsible Official (PRINT):_____

TITLE:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record.

Responsible Official (Signature):_____

TANK	IDENTIFICATION NO.					
	CAPACITY (bbl)					
	DIAMETER (ft)					
	HEIGHT (ft)					
	PAINT CONDITION[a]					
	COLOR[b]					
	POSITION[c]					
	TYPE OF ROOF[d]					
PRODUCT	PRODUCT NAME					
	REID VAPOR PRESSURE (psi)					
	TRUE VAPOR PRESSURE (psia)					
	STORAGE TEMP. (°F)					
ANNUAL THROUGHPUT (bbl/yr)						
AIR POLLUTION CONTROL DEVICE/METHOD[e]						

a. Indicate paint condition as "G" (good) or "P" (poor).
b. If the tank is totally underground, indicate a "und" in lieu of specifying a color.
c. Indicate whether the tank's position is "V" (vertical) or "H" (Horizontal).
d. Indicate whether the roof construction is "F" (flat), "C" (cone) or "D" (dome).
e. Indicate applicable control device/method (i.e., vapor recovery system, vapor balance, etc.).

ANNUAL EMISSIONS REPORT FORM
TERMINAL EQUIPMENT - PROCESS RATE
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period:_____ Date:_____

Facility Name:_____

Equipment Location:_____

Equipment Description:_____

Equipment Capacity/Rating (specify units):_____
(Units such as Horsepower, kilowatt, tons/hour, Btu/hr, etc.)

Serial/ID No.:_____

Responsible Official (PRINT):_____

TITLE:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Signature):_____

EMISSION SOURCE	ANNUAL PROCESS RATE	NOTES

MONITORING REPORT FORM
PETROLEUM TRUCK LOAD RACK
COVERED SOURCE PERMIT NO. 0863-01-C

Issuance Date: November 16, 2018 **Expiration Date: November 15, 2023**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following on a semi-annual basis.

(Make Copies for Future Use)

For Period:_____ Date:_____

Facility Name:_____

Equipment Location:_____

Responsible Official (PRINT):_____

TITLE:_____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record.

Responsible Official (Signature):_____

THROUGHPUT ~~OF LOAD RACK~~ (Barrels/Month)

~~MONTH~~ | ~~TYPE OF FUEL~~

MONTH	Motor Gasoline	~~Aviation Gasoline~~	~~Diesel~~		~~Jet Fuel~~			
	Monthly	12-mo. Rolling Avg.	~~Monthly~~	~~12-mo. Rolling Avg.~~	~~Monthly~~	~~12-mo. Rolling Avg.~~	~~Monthly~~	~~12-mo. Rolling Avg.~~
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
TOTAL								

~~Vapor Recovery Unit Make & Model:~~_____

Deleted Cells
Deleted Cells
Deleted Cells
Deleted Cells
Deleted Cells
Deleted Cells
Deleted Cells
Deleted Cells
Deleted Cells

~~Maximum Emission from Vapor Recovery Unit (mg/l):~~

No. of stations:_____No. of arms per station:_____

ATTACHMENT II – GHG: SPECIAL CONIDITIONS
GHG REDUCTION REQUIREMENTS
COVERED SOURCE PERMIT NO. 0863-01-C

Amended Date: September 1, 2021 **Expiration Date: November 15, 2023**

In addition to the standard conditions of the CSP, the following state enforceable special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment II – GHG of this permit encompasses the following equipment, and associated appurtenances:

Petroleum Refineries	
Unit No.	**Description**
———	Loading Vent

(Auth.: HAR §11-60.1-3)

2. The equipment is subject to GHG emission reduction requirements of HAR, Chapter 11-60.1, Subchapter 11, and associated permit conditions based on information from the GHG emission reduction plan and permit application for significant modification. The GHG emission reduction plan shall become a part of the CSP application process for renewals and any required modifications pursuant to HAR, Chapter 11-60.1, Subchapter 5. With each subsequent GHG reduction plan submittal, the permittee shall report:

   a. The GHG emission reduction status;
   b. Factors contributing to the emission changes;
   c. Any control measure updates; and
   d. Any new developments or changes that would affect the basis of the facility-wide GHG emissions cap.

   (Auth.: HAR §11-60.1-5, §11-60.1-204(g))

Section B. GHG Permit Conditions

1. Permit conditions specified in Attachment II – GHG, including provisions to limit maximum potential GHG emissions, are state-only enforceable requirements which are not federally enforceable under the federal Clean Air Act.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, 11-60.1-161; 40 CFR §70.6)[1]

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

   (Auth.: HAR §11-60.1-3, §11-60.1-90, 11-60.1-161)[1]

Section C. GHG Emission Limitations

1. GHG Emission Caps

   a. The IES Kapolei Bulk Storage Terminal shall not emit or cause to be emitted carbon dioxide equivalent (CO_2e) emissions in excess of its individual GHG emissions cap specified in Attachment II – GHG, Special Condition No. C.1.a of CSP No. 0863-02-C for IES Process Units, except as specified in Attachment II – GHG, Special Condition No. C.1.c.iv of this permit.

   b. The IES Kapolei Bulk Storage Terminal combined with all partnering facilities shall not emit or cause to be emitted total combined CO_2e emissions in excess of the combined limit specified in Attachment II – GHG, Special Condition No. C.1.b of CSP No. 0863-02-C for IES Process Units.

   c. For purposes of the CO_2e emission limits in Attachment II - GHG, Special Condition Nos. C.1.a and C.1.b:

      i. The CO_2e emissions shall have the same meaning as that specified in HAR §11-60.1-1;

      ii. In accordance with HAR §11-60.1-204(d)(6)(B), biogenic CO_2 emissions shall not be included when determining compliance with the emissions limit;

      iii. The permittee shall be in compliance with the emissions limits by the end of 2019 and each calendar year thereafter;

      iv. The permittee may exceed the emissions cap specified in Attachment II – GHG, Special Condition No. C.1.a, if the GHG emissions limit specified in Attachment II – GHG, Special Condition No. C.1.b, is met; and

      v. At no time shall the permittee exceed Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b, simultaneously over a calendar year. For incidences when Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b, are exceeded simultaneously, emissions in excess of the total combined cap shall be allocated according to the following equation for compliance purposes:

$$X = XG\ \frac{(A - C)}{\sum_{A_i > C_i}(A_i - C_i)}$$

Where:

X = Adjusted portion in metric tons or short tons of GHG emissions that are in excess of total combined cap specified in Attachment II – GHG, Special Condition No. C.1.b. The equation applies to all affected facilities that do not meet the individual and total combined GHG emission caps specified in Special Condition Nos. C.1.a and C.1.b, respectively.

XG = Total combined actual GHG emissions from affected facilities minus total combined GHG emissions cap. Total combined emissions cap shall be sixteen percent (16%) below the total combined baseline emission level less biogenic CO_2 emissions.

A = Actual GHG emissions from the affected facility.

C = GHG emissions cap for the affected facility.

$\sum_{Ai>Ci}(Ai - Ci)$ = The sum of the difference between the actual emissions and cap emissions for all facilities that did not achieve the individual facility wide GHG emissions cap.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-204)

2. GHG Emission Cap Revisions

a. The facility-wide GHG emissions cap may be re-evaluated and revised by the Department in accordance with HAR §11-60.1-204(h).
b. Any revision to the facility-wide GHG emissions caps shall be considered a significant modification subject to the application and review requirements of HAR §11-60.1-104. For each GHG emission cap revision, the Department may impose additional emission limits or requirements, or limit the time frame allowed for the revised GHG emissions cap.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-204)

Section D. Monitoring and Record Keeping Requirements

1. GHG Emissions (Petroleum Refineries Source Category)

For calculating GHG emissions from sources in the petroleum refineries source category and quality assurance (QA)/quality control (QC) requirements, the permittee shall:

a. Monitor mass emissions data with the appropriate methods specified in 40 Code of Federal Regulations (CFR) §98.254;
b. Estimate missing data in accordance with the applicable procedures in 40 CFR §98.255; and
c. Calculate carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) in accordance with the appropriate methods in 40 CFR §98.253.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §98.253, §98.254, §98.255)

2. Total CO_2e Emissions

For determining CO_2e emissions for purposes of determining compliance with the GHG emission caps and assessing fees, the permittee shall:

a. Sum the emission estimates from Attachment II – GHG, Special Condition No. D.1 using Equation A-1 of 40 CFR §98.2;
b. Convert the metric tons of CO_2e emissions to short tons for monitoring and annual emissions reporting as applicable. For the conversion, one (1) short ton is equal to 0.90718474 metric tons; and
c. Report CO_2e emissions to the Department in accordance with Attachment II – GHG, Special Condition No. E.4.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §98.2)

3. Records

All records, including support information, shall be maintained for **at least five (5) years** from the date of the monitoring sample, measurement, test, report, or applications. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and be made available to the Department or authorized representative(s) upon request.

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

Section E. Notification and Reporting Requirements

1. Standard Condition Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 17 and 24, respectively:

a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
b. 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; SIP §11-60-10, SIP §11-60-16)[2]

2. Deviations

The permittee shall report in writing **within five (5) working days** any deviations from permit requirements, including those attributed to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for testing, or 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)

3. Compliance Certification

a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. Environmental Protection Agency, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 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:

i. The identification of each term or condition of the permit that is the basis of the certification;
ii. The compliance status;
iii. Whether compliance was continuous or intermittent;
iv. The methods used for determining the compliance status of the source currently and over the reporting period;
v. 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;
vi. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and which the excursion or exceedances as defined in 40 CFR Part 64 occurred; and
vii. Any additional information as required by the Department, including information to determine compliance.

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

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

4. Monitoring Reports

a. The permittee shall complete and submit **semi-annual** monitoring reports to the Department that provide the metric tons and short tons of CO_2e emitted by all partnering facilities, except that biogenic CO_2 shall be excluded from the total CO_2e emissions. All reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 – June 30 and July 1 – December 31). The following enclosed form, or equivalent form, shall be used for reporting and shall be signed and dated by a responsible official:

Monitoring Report Form: GHG Emissions

b. For calendar years 2019 and 2020, the permittee shall report the CO_2e emissions **within sixty (60) days** after the issuance of this permit. The Monitoring Report Form: GHG Emissions, or equivalent form, for the 2019 and 2020 calendar years shall be used for reporting and shall be signed and dated by a responsible official.
c. For calendar year 2021, the permittee shall report the CO_2e emissions **within sixty (60) days** after the issuance of this permit or **within sixty (60) days** after the end of the semi-annual calendar period, whichever is later. The Monitoring Report Form: GHG Emissions, or equivalent form, for the 2021 calendar year shall be used for reporting and shall be signed and dated by a responsible official.

d. Upon written request by the permittee, the deadline for submitting the monitoring report may be extended, if the Department determines that reasonable justification exists for the extension.

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

Section F. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

[1]The citations to the 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.
[2]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.

MONITORING REPORT FORM
GHG EMISSIONS
COVERED SOURCE PERMIT NO. 0863-01-C
(PAGE 1 OF 2)

Amended Date: September 1, 2021 **Expiration Date: November 15, 2023**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Location: _____

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

1. Report the carbon dioxide equivalent (CO_2e) emitted by IES Kapolei Bulk Storage Terminal during each reporting period for purposes of the facility's individual GHG emissions cap:

Emission Year Reporting For _____					
Reporting Period	IES Kapolei Bulk Storage Terminal (Metric Tons of CO_2e)			IES Kapolei Bulk Storage Terminal (Total CO_2e)	
	CO_2 (Non-Biogenic)	CH_4	N_2O	Metric Tons	Short Tons
January 1 – June 30 (1st Semi-Annual Period)					
July 1 – December 31 (2nd Semi-Annual Period)					
Total Emissions →					

MONITORING REPORT FORM
GHG EMISSIONS
COVERED SOURCE PERMIT NO. 0863-01-C
(PAGE 2 OF 2)

Amended Date: September 1, 2021 **Expiration Date: November 15, 2023**

2. Report the total combined CO_2e emitted by all partnering facilities during each reporting period for purposes of the total combined GHG emissions cap for these facilities:

Emission Year Reporting For _____					
Reporting Period	Total Combined Emissions from all Partnering Facilities (Metric Tons of CO_2e)			Total CO_2e	
	CO_2 (Non-Biogenic)	CH_4	N_2O	Metric Tons	Short Tons
January 1 – June 30 (1st Semi-Annual Period)					
July 1 – December 31 (2nd Semi-Annual Period)					
Total Emissions →					

3. For incidences when the individual cap for IES Kapolei Bulk Storage Terminal and total combined cap for all partnering facilities is exceeded, report the emissions in excess of the total combined cap using the following equation:

$$X = XG \frac{(A-C)}{\sum_{A_i>C_i}(A_i-C_i)} = \_\_\_\_\_$$

Where:

X = Adjusted portion in metric tons or short tons of GHG emissions that are in excess of total combined cap specified in Attachment II – GHG, Special Condition No. C.1.b. The equation applies to all affected facilities that do not meet the individual and total combined GHG emission caps specified in Attachment II – GHG, Special Condition Nos. C.1.a and C.1.b, respectively.

XG = Total combined actual GHG emissions from affected facilities minus total combined GHG emissions cap. Total combined emissions cap shall be sixteen percent (16%) below the total combined baseline emission level less biogenic CO_2 emissions.

A = Actual GHG emissions from the affected facility.

C = GHG emissions cap for the affected facility.

$\sum_{A_i>C_i}(A_i - C_i)$ = The sum of the difference between the actual emissions and cap emissions for all facilities that did not achieve the individual facility-wide GHG emissions cap.

Mark Dangler
Vice President - Logistics

Island Energy Services, LLC
91-480 Malakole Street
Kapolei HI 96707-1807
Tel 808-682-2299
Fax 808-682-2214

November 7, 2022

HAND DELIVERED

Ms. Marianne Rossio, P.E.
Hawaii Department of Health - Clean Air Branch
2827 Waimano Home Road 130
Pearl City, Hawaii 96782

Subject: Covered Source Permit (CSP) Nos. 0863-01-C
IES Downstream, LLC - Kapolei Terminal - Insignificant Activity Notification

Dear Ms. Rossio:

In accordance with Hawaii Administrative Rule (HAR) 11-60.1-82(f)(7), IES Downstream LLC – Kapolei Bulk Storage Terminal (IES) is notifying the HDOH of an upcoming insignificant activity involving construction and operation of five (5) new Jet Fuel Storage Tanks (with internal floating roofs) at IES's Kapolei Bulk Storage Terminal. These tanks are required for the removal and storage of the aviation fuel from the Navy's Red Hill Storage Facility located on Oahu and must be constructed and operational by August 26, 2023 to meet the Navy's defueling timeline. This requires IES to commence concrete foundation work by December 1, 2022, to provide enough curing time for the concrete and fabrication time for the steel to be erected on top of the foundation to complete the tanks.

IES has recently retired the Refinery Process Units covered source permit CSP-0863-02-C, and will be submitting a permit renewal and minor modification for the adjacent Kapolei Bulk Storage covered source permit CSP-0863-01-C by November 15, 2022, establishing CSP-0863-01-C as a Petroleum Bulk Storage Terminal and not a Refinery. This permit renewal/minor modification will include changes to the applicable requirements that are necessary for an accurate CSP renewal application including no longer designating tanks as Group 1 or Group 2 type tanks. It will also include removal of the following references to federal regulations applicable exclusively to refineries, reflecting the facility's change to a terminal source;

- 40 CFR Part 60, NSPS, Subpart GGG: Standards of Performance for Equipment Leaks in Petroleum Refineries
- 40 CFR Part 61, NESHAP, Subpart FF: National Emission Standard for Benzene Waste Operations
- 40 CFR Part 63, NESHAP, Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

This renewal application seeks to establish that the terminal will be a nonmajor source (area source) of HAP, subject to the NESHAP for area source bulk gasoline terminals (NESHAP Subpart BBBBBB). To that end, the terminal's gasoline loading rack throughput is revised downward, and requirements from Subpart BBBBBB replace those of Subpart CC.

Ms Marianne Rossio
Clean Air Branch
November 4, 2022

The 5 new Jet tanks would be considered insignificant emission units because the emissions are less than 2 tons per year of VOC, and they are not subject to any of the following federal regulations:

- NESHAP BBBBBB only applies to tanks that store product that meet the definition of "gasoline," and jet kerosene does not.
- Total vapor pressure from the jet kerosene tanks are below 3.5 kPa, which is the applicability cutoff for NSPS Kb.

Potential emissions for 5 new Jet storage tanks were calculated using TankESP, a software tool that correctly implements the equations of AP-42 Section 7.1, EPA's emission factor guide for organic liquid storage tanks and are shown in Table 1. The basis for emissions is based on the maximum contract throughput amount of 3.5 million barrels per year plus a 10% safety factor. Table 1 shows that emissions from these tanks do not exceed the significant thresholds set by the HAR for any of the regulated air pollutants.

Table 1 - Criteria Pollutant Emissions

Basis: PTE 3,500,000 BBLS/yr + 10%

Tank	Diameter (ft)	Height (ft)	Volume (BBLS)	Pb (tpy)	VOC (tpy)	CO2e (tpy)	HAPS (tpy)
Tank 114	138	56	135,000	0.00	0.02	0.00	0.000
Tank 115	175	64	275,000	0.00	0.04	0.00	0.002
Tank 141	175	64	275,000	0.00	0.04	0.00	0.002
Tank 142	175	64	275,000	0.00	0.04	0.00	0.002
Tank 143	175	64	275,000	0.00	0.04	0.00	0.002
Significant Threshold per tank[1] (tpy)				***0.15***	***2***	***3,500***	***0.25***

[1]Per HAR 11-60.1-1 and HAR 11-60.1-82(f.7)

If you have any further questions, please contact Gail Godenzi, Technical Manager, at (808) 682-3113 or gail.godenzi@islandenergyservices.com.

Sincerely,

Mark Dangler

gng

Mark Dangler
Vice President - Logistics

Island Energy Services, LLC
91-480 Malakole Street
Kapolei HI 96707-1807
Tel 808-682-2299
Fax 808-682-2214

February 1, 2022

CERTIFIED MAIL NO. 7019 0140 0000 7968 3689
RETURN RECEIPT REQUESTED

Ms. Marianne Rossio, P.E.
Hawaii Department of Health - Clean Air Branch
2827 Waimano Home Road 130
Pearl City, Hawaii 96782

Subject: Covered Source Permit (CSP) Nos. 0863-01-C
IES Downstream, LLC - Kapolei Terminal - Insignificant Activity Notification

Dear Ms. Rossio:

In accordance with Hawaii Administrative Rule (HAR) 11-60.1-82(f)(7), IES Downstream LLC – Kapolei Bulk Storage Terminal is notifying the HDOH of an upcoming insignificant activity involving operation of a leased package boiler to produce steam to support the IES 2022 Black Oil Tank cleaning project.

Because Par has vacated the site and no longer can provide IES with steam, IES will be leasing a 150HP ultra-low sulfur diesel fired boiler from Powerhouse Equipment and Engineering Co., Inc. Emissions from the boiler are shown below in Table 1 and the basis for emissions are included as Attachment 1. Table 1 shows that the boiler would need to be operated more than 4075 hours at full load (**32,809 MMBTU input**) to exceed the significant threshold of 5 tpy of CO, and/or 2 tpy of the other regulated air pollutant insignificant activity thresholds set by the HAR. Since the boiler will only be run intermittently, and rarely at full load, we do not expect to exceed 32,809 MMBTU input energy during this project. Therefore, this is considered an insignificant activity and does not require a modification to CSP 0863-01-C.

Table 1

Criteria, GHG, and Total HAPs
Basis: 4075 hrs @ 100% Load

Emission Unit	Fuel	Pollutant Emissions (tpy)								
		CO	NOX	PM	PM10	PM2.5	SO2	VOC	CO_2e	HAPs
Powerhouse – 150HP boiler	Ultra-Low Sulfur Diesel	4.99	1.64	0.30	0.30	0.30	0.01	0.06	2,090	8.06E-03
Significant Threshold[1] (tpy)		***5***	***2***	***2***	***2***	***2***	***2***	***2***	***3,500***	***0.5***

[1]Per HAR 11-60.1-1 and HAR 11-60.1-82(f)

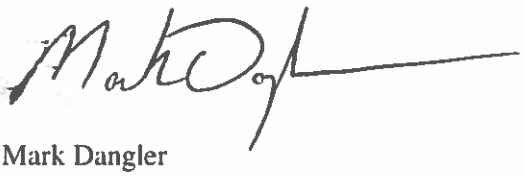
Ms Marianne Rossio
Clean Air Branch
Feb 1, 2022

IES will be monitoring the running hours and fuel usage to establish a running total of input energy not to exceed 32,809 MMBTU for this project. The project is expected to commence in late February 2022 and be completed by end of YR2022.

Moving forward, we expect to lease package boilers in the future for tank cleaning maintenance. We therefore plan to add a boiler to the list of "Insignificant Activities" in our next CSP permit amendment.

If you have any further questions, please contact Gail Godenzi, Technical Manager, at (808) 682-3113 or gail.godenzi@islandenergyservices.com.

Sincerely,



Mark Dangler

gng

Attachments

Ms Marianne Rossio
Clean Air Branch
Feb 1, 2022

File : O:\Refining\Envr\Kapolei Terminal\Air\Title V Compliance\Air Emission Inventory - Fees\Insignificant Activities 2022\Package Boiler Insig Activity 2022.docx

Attachment 1
Emission Calculations

Criteria, GHG, and Total HAPs Basis: 4075 hours per year

Emission Unit	Fuel	Pollutant Emissions (tpy)								
		CO	NOX	PM	PM10	PM2.5	SO2	VOC	CO_2e	HAPs
Powerhouse – 150HP boiler	Ultra Low Sulfer Diesel	4.99	1.64	0.30	0.30	0.30	0.01	0.06	2,090	8.06E-03
Significant Threshold [1] ***(tpy)***		***5***	***2***	***2***	***2***	***2***	***2***	***2***	***3,500***	***0.5***

[1] Per HAR HAR 11-60.1-1 and HAR 11-60.1-82(f)

Unit	Input MMBTU/hr	Output MMBTU/yr	Hours per Year (100% Load)
Powerhouse – 150HP boiler	32,809	25,591	4,075

5.6 months full load 24/7

Emission Factors Output 25,591 MM BTU/hr

Emission Unit	Fuel	Units	CO	NO_x	PM [5]	PM_{10} / $PM_{2.5}$ [2]	SO_2	VOC	CH_4	N_2O	CO_2
Powerhouse – 150HP boiler[3]	Fuel Oil #2	LB/MMBtu	0.390	0.128	0.024	0.024	0.001	0.005	3.00E-03	6.00E-04	163

[2] It is consevatively assumed that emissions of $PM_{2.5}$ equal emissions of PM_{10}.
[3] Powerhouse Boiler Fuel Oil #2 emission factors taken from email from Manufacuture. Unit specification sheet presents HSD emission factor.
[4] NO_x and CO emissions factors are calculated based on the following PPM values provided in the manufacturer specification sheets, using EPA Method 19. All other emission factors taken from AP-42, Sec. 1.4, Table 1.4-1 (7/98), Table 1.4-2 (7/98), for natural gas, and from Sec. 1.5, Table 1.5-1 (7/08) for propane.

Conversion Factors and Constants:
Carbon Monoxide Molecular Weig 28.0 lb/lbmol
Nitrogen Dioxide Molecular Weigl 46.0 lb/lbmol
Fuel Exhaust Dry Volume 8710.0 dscf fuel exhaust / MMBtu fuel, EPA Method 19 Table 19.2, for both natural gas and propane
[5] PM emission factor taken from AP-42 Section 1 for external combustion of each specific fuel type

Criteria Pollutant Emissions

Emission Unit	Fuel	Output Power Rating (HP)	Input Power Rating[C] (MMBtu/hr)	Operating Hours [A] (hr/yr)	CO		NO_x		PM		PM_{10}		$PM_{2.5}$ [B]		SO_2		VOC	
					(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
Powerhouse – 150HP boiler	Diesel	150	6.28	4,075	2.45E+00	4.99E+00	8.04E-01	1.64E+00	1.48E-01	3.02E-01	1.48E-01	3.02E-01	1.48E-01	3.02E-01	6.28E-03	1.28E-02	3.01E-02	6.14E-02

[A] Hours of operation assumed to be 24 hours/day , 365 days/year
[B] It is consevatively assumed that emissions of $PM_{2.5}$ equal emissions of PM_{10}.
Conversion 33475.00 Btu/hr = 1 HP
[C] Per Manufactuer's Data sheet. Calculates to a 78% efficiency

GHG Emissions

Emission Unit	Fuel	Output Power Rating (HP)	Input Power Rating[B] (MMBtu/hr)	Operating Hours [A] (hr/yr)	CH_4 (tpy)	N_2O (tpy)	CO_2 (tpy)	CO_2e (tpy)
Powerhouse – 150HP boiler	Diesel	150	6.28	4,075	3.84E-02	7.68E-03	2086	2090

[A] Hours of operation assumed to be 24 hours/day , 365 days/year
Conversion 33475.00 MMBtu/hr / HP
[B] Per Manufactuers Data sheet. Calculates to a 78% efficiency

Summary of Diesel Gas Combustion HAP Emission

Pollutant	CAS #	Polycyclic Organic Matter (POM) Pollutant?	Emission Factor[1] (lb/10^3 gal)	Emission Factor[2] (lb/MMBtu)	Total Emission Rate (tpy)
Benzene	71432	YES	2.14E-04	1.53E-06	4.20E-05
Ethylbenzene	100414	YES	6.36E-05	4.54E-07	1.25E-05
Formaldehyde	50000	YES	3.30E-02	2.36E-04	6.48E-03
Naphthalene	91203	YES	1.13E-03	8.07E-06	2.22E-04
1,1,1-Trichloroethane	71556	YES	2.36E-04	1.69E-06	4.64E-05
Toluene	108883	YES	6.20E-03	4.43E-05	1.22E-03
O-Xylene	95476	YES	1.09E-04	7.79E-07	2.14E-05
Acenaphthene	83329	YES	2.11E-05	1.51E-07	4.15E-06
Acenaphthylene	203968	YES	2.53E-07	1.81E-09	4.97E-08
Anthracene	120127	YES	1.22E-06	8.71E-09	2.40E-07
Benz(a)anthracene	56553	YES	4.01E-06	2.86E-08	7.88E-07
Benzo(b,k)fluoranthene	207089	YES	1.48E-06	1.06E-08	2.91E-07
Benzo(g,h,i)perylene	191242	YES	2.26E-06	1.61E-08	4.44E-07
Chrysene	218019	YES	2.38E-06	1.70E-08	4.68E-07
Dibenzo(a,h)anthracene	53703	YES	1.67E-06	1.19E-08	3.28E-07
Fluoranthene	206440	YES	4.84E-06	3.46E-08	9.51E-07
Fluorene	86737	YES	4.47E-06	3.19E-08	8.78E-07
Indo(1,2,3-cd)pyrene	193395	YES	2.14E-06	1.53E-08	4.20E-07
Phenanthrene	85018	YES	1.05E-05	7.50E-08	2.06E-06
Pyrene	129000	YES	4.25E-06	3.04E-08	8.35E-07
OCDD	3268879	YES	3.10E-09	2.21E-11	6.09E-10
				Total HAP	**8.06E-03**
				Max Single HAP (Formaldehyde)	**6.48E-03**

[1] HAP Emission factor source: AP-42 Tables 1.3-9 (05/10) for fuel oil combustion.

[2] To convert from lb/10^3 gal to an energy basis (lb/MMBtu), divide by a heating value of 140 MMBtu/10^3 gal for distillate fuel oil.

Attachment 2
150HP Boiler Equipment Specs

RH-150

POWERHOUSE

EQUIPMENT SPECIFICATION SHEET

800.37.STEAM POWERHOUSE.COM

GENERAL INFORMATION

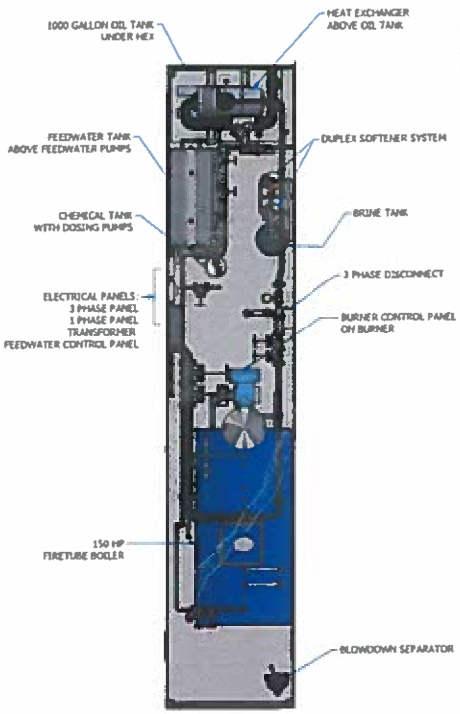
BRAND	POWERHOUSE	
RENTAL CATEGORY	PORTABLE BOILER ROOM	
BOILER TYPE	FIRETUBE	
BOILER SIZE	150	HP
MAX OUTPUT CAPACITY	5,175	PPH
MAX PRESSURE (STM / HW)	150 / 150	PSIG
FUEL(S)	NG / #2 OIL / PROPANE	
SERVICE	LPS, HPS, HHW	
NOX EMSSION RATING (PPM)	75	PPM

SPECS & REQUIREMENTS

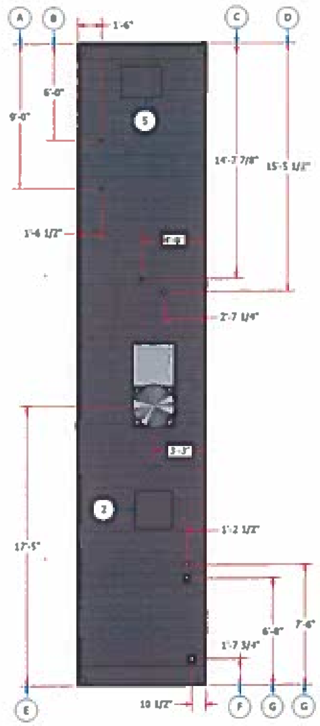
OUTPUT SPECS			
	OPERATING RANGE	5 - 140	PSIG
	TURNDOWN (NG / OIL	4.5:1 / 3.3:1	
	OIL TANK CAPACITY	1,000	
	STEAM QUALITY	99.5	%
	EFFICIENCY (NG / OIL)	80-83	%
	HW DESIGN OUTPUT	450 GPM @ 20° ΔT	
	DHW DESIGN OUTPUT	-	
INPUT REQUIREMENT			
	CITY WATER	20.0 GPM @ 50 PSIG	
	ELECTRICITY	480/3/60 @ 30 A (FLA)	
	FUEL INPUT (NG / OIL)	6.28 / 6.28	MMBTU/HR
	NG FLOW	1,399 - 6,280	CFH
	NG PRESSURE	4.0 - 7.0	PSIG
	#2 OIL FLOW	13.5 - 45.0	GPH
	#2 OIL PRESSURE	USE ONBOARD OIL PUMP	
	PILOT	PROPANE TANK INCLUDED	
	INSTRUMENT AIR	-	

CONNECTIONS & DIMENSIONS

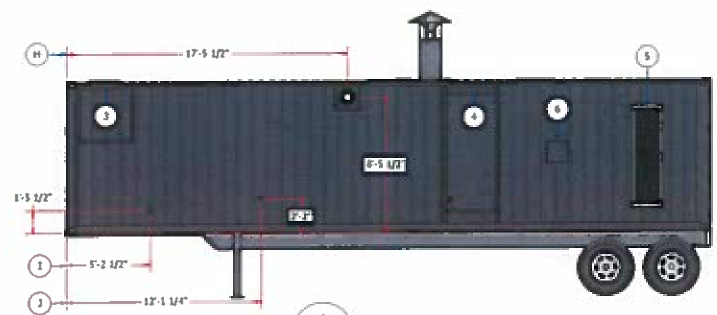
CONNECTIONS			
	STEAM OUTLET	6.0"	300# FLG.
	HHW SUPPLY / RETURN	6.0"	150# FLG.
	STACK EXHAUST	16"	DIAMETER
	CITY WATER	2.0"	NPT
	CONDENSATE RETURN	2.0"	NPT
	NATURAL GAS	2.0"	NPT
	FUEL OIL SUPPLY/RETURN	1.0"	NPT
	BLOWDOWN DRAIN	4.0"	150# FLG.
	SYSTEM DRAIN	1.25"	NPT
	ELECTRICAL	2.0"	NPT
DIMENSIONS			
	OVERALL LENGTH	40' 00"	
	OVERALL WIDTH	08' 00"	
	OVERALL HEIGHT	13' 06"	
	SHIPPING WEIGHT	37,000	LBS
	OPERATING WEIGHT	41,000	LBS



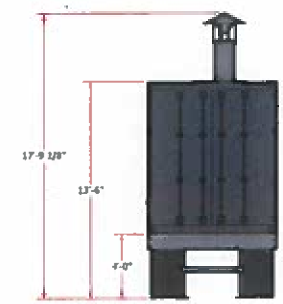
1 GA-150 EQUIPMENT LAYOUT SCALE 1 / 45



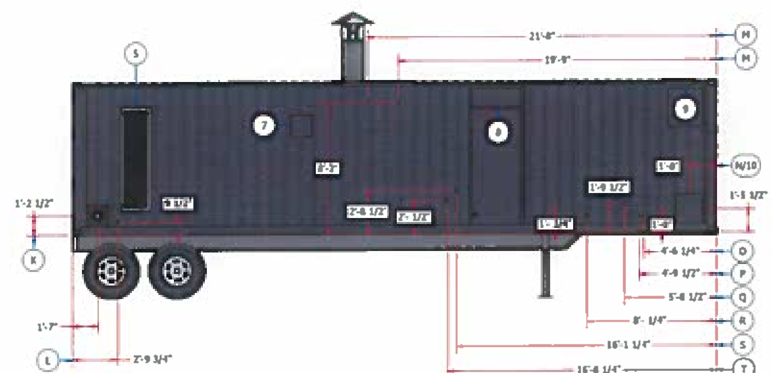
2 GA-150 ROOFTOP CONNECTIONS SCALE 1 / 45



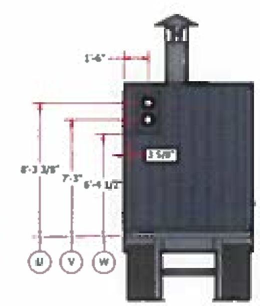
3 GA-150 STREET SIDE ELEVATION SCALE 1 / 45



5 GA-150 REAR ELEVATION SCALE 1 / 45



4 GA-150 CURB SIDE ELEVATION SCALE 1 / 45



6 GA-150 FRONT ELEVATION SCALE 1 / 45

RH-150 FIELD CONNECTIONS

ITEM	DESCRIPTION
A	CONDENSATE RETURN - 2" Ø NPT
B	FEEDWATER TANK VALVE - 2" Ø NPT
C	HIGH PRESSURE STEAM VENT - 2" Ø NPT
D	HEX SAFETY RELIEF - 2-1/2" Ø NPT
E	EXHAUST STACK - 16" Ø
F	BLOWDOWN SEPARATOR VENT - 4" Ø NPT
G	BOILER SAFETY RELIEF VENT - 3" Ø NPT
H	HIGH PRESSURE STEAM - 6" Ø 300 LB. FLG.
I	FEEDWATER OVERFLOW DRAIN - 2" Ø NPT
J	REMOTE FEEDWATER - 1-1/4" Ø NPT
K	BLOWDOWN SEPARATOR DRAIN - 4" 150 LB. FLG.
L	100% BOILER DRAIN - 1-1/4" Ø NPT CONN.
M	NATURAL GAS VENT - 3/4" Ø NPT
N	OIL FILL - 2" Ø NPT
O	OIL RETURN - 3/4" Ø NPT
P	OIL SUPPLY - 1" Ø NPT
Q	CITY WATER - 2" Ø NPT
R	SOFTENER DRAIN - 1-1/2" Ø NPT
S	NATURAL GAS INLET - 2" Ø NPT
T	ELECTRICAL CONNECTION - 2" Ø NPT
U	RETURN WATER TO BLDG. FROM HEX - 6"Ø 150 LB. FLG.
V	SUPPLY WATER TO HEX FROM BLDG. - 6"Ø 150 LB. FLG.
W	OIL TANK VENT - 2" Ø NPT

RH-150 ACCESS OPENINGS

TYPE	DESCRIPTION
1	HEX - 23"x30" TOP ACCESS (HINGED)
2	BOILER MANWAY - 24" X 24" ACCESS (BOLTED)
3	HEX - 38" X 38" SIDE ACCESS (HINGED)
4	ELEVATED ACCESS DOOR - 40-1/4" X 84" (HINGED)
5	LOUVER - 18" X 72" AIR ACCESS (FIXED)
6	HANDHOLE - 12"x12" ACCESS (BOLTED)
7	INSPECTION PORT - 12"x12" ACCESS (BOLTED)
8	MAN DOOR - 36" X 84" ACCESS (HINGED)
9	EXHAUST FAN - 28" X 28" (FIXED)
10	OIL FILL - 22" X 22" ACCESS (HINGED)

POWERHOUSE

POWERHOUSE BOILER EQUIPMENT

WWW.POWERHOUSE.COM

RH-150-3 GENERAL ARRANGEMENT

REVISION	DATE	BY	CHK
APPROVED FOR RELEASE	4/14/2020	T.D.	B.P.

SHIPPING INFO — DRY WEIGHT: 37,000 LBS.

UNIT DATA — OPERATING WEIGHT: 41,800 LBS.

DRAWING DATA — DRAWN BY: T.D. — DESIGN BY: ENG. — DATE: 4/14/2020 — SHEET SIZE: 24 X 36 — SCALE: AS NOTED — DRAWING TYPE: AS BUILT

CANADA - 150 HP - HBC 1400633
Boiler Horsepower

FORM P-2 MANUFACTURER'S DATA REPORT FOR ALL TYPES OF BOILERS EXCEPT WATERTUBE AND ELECTRIC

As Required by the Provisions of the ASME Code Rules, Section I

1. Manufactured by Hurst Boiler & Welding Co., Inc., 21971 U.S. Hwy 319 North, Coolidge, Georgia, 31738
(Name and address of manufacturer)

2. Manufactured for POWERHOUSE EQUIPMENT, 240 CREEK RD, DELANCO, New Jersey, 08075
(Name and address of purchaser)

3. Location of Installation N/A
(Name and address)

4. Type SCOTCH (HRT, etc.) Boiler No. S750-150-250 (Mfr's. Serial No.) R1358.5 (CRN) 1400632B2 (Drawing No.) 20405 (Nat'l Board No.) Year Built 2015

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to Section I of the ASME BOILER AND PRESSURE VESSEL CODE 2013 (Year).

Addenda to NONE (Date) (if applicable), and Code Cases NONE (Numbers)

Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors are attached for the following items of this report:

N/A
(Name of part, item number, mfr's. name and identifying Certification Mark)

6. Shell or drums

1 (no.)	SA-516-70 (mat'l. spec. gr.)	3/8" (thickness)	5' 6" [diameter (ID)]	10' 4.5" (length, inside)	N/A [diameter (ID)]	N/A (length, inside)

7. Joints

WELDED [long (seamless, welded)]	100% [efficiency (as compared with seamless)]	SEAMLESS [girth (seamless, welded)]	1 (no. of shell courses)

8. Heads SA-516-70 - 3/4" THICKNESS - FLAT - N/A
(Material Specification No. - Thickness - Flat, Dished, Ellipsoidal - Radius of Dish)

9. Tubesheet SA-516-70 3/4" (Mat'l. Spec., Grade, Thickness) Tube Holes 2-17/32" (Diameter)

10. Boiler Tubes: No. 108 SA-178-A (Mat'l. Spec., Grade) Straight (Straight or Bent)

Diameter 2-1/2" Length (If various, give max. & min.) 128-1/2" & 104-1/2" Gage 12 (or thickness)

11. Furnace No. 1 Size 30" (O.D. or WxH) Length, each section 110-1/8" Total 110-1/8"

Type PLAIN
(Plain, Adamson, Ring Reinforced, Corrugated, Combined, or Stayed)

SA-516-70, 1/2" (Mat'l. Spec., Grade, Thickness) Seams: Type WELDED (Seamless, Welded)

12. Staybolts: No. 6 Size 1-1/2" SA-675-70 N/A N/A 10.6 SQ. IN.
(Diameter, Mat'l. Spec., Grade, Size Telltale, Net Area)

Pitch 12.50" (Horizontal and Vertical) MAWP 150 psi

13. Stays or braces

Location	Material Spec. No.	Type	No. and Size	Maximum Pitch	Fig. PFT-32 L/I	Dist. Tubes to Shell	MAWP
(a) F.H. above tubes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) R.H. above tubes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(c) F.H. below tubes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(d) R.H. below tubes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(e) Through stays	SA-675-70	THRU.	6 @ 1-1/2"	12.50"	N/A	N/A	150
(f) Dome braces	N/A	N/A	N/A	N/A	N/A	N/A	N/A

14. Other Parts. 1. TURNAROUND WRAPPER 2. TURNAROUND BACK PLATE 3. REAR ACCESS
(Brief Description - i.e. Dome, Boiler Piping, etc.)

1. (1) 1/2" THICKNESS, SA-516-70 PLATE, ROLLED TO 44" ID, WELDED TO SHELL
2. (1) 3/4" THICKNESS, SA-516-70 PLATE, WELDED INSIDE WRAPPER
3. (1) 24" x 9-1/2", 3/8" THICKNESS, SA-53-B ERW PIPE, WELDED TO REAR SHELL
(Mat'l. Spec., Grade, Size, Material Thickness, MAWP)

FORM P-2 (BACK)

Boiler No. S750-150-250 (Mfr's. Serial No.) | R1358.5 (CRN) | 1400632B2 (Drawing No.) | 20405 (Nat'l Board No.)

15. Openings: (a) Steam (1) 6" 300# W/N FLG, (1) 6" SCH80, SA106B PIPE (No., Size, and Type) (b) Pressure Relief Valve 2, 2", 3000#, THREADED CPLGS, SA-105 (No., Size, and Type)

(c) Blowoff (2) 1-1/4" 3000# THREADED CPLGS., SA-105, B. SHELL (No., Size, Type, and Location) (d) Feed (2) 1-1/4" 3000# THREADED CPLGS., SA-105, S. SHELL (No., Size, Type, and Location)

(e) Manholes: No. 1 Size 12" x 16" Location TOP SHELL

(f) Handholes: No. 5 Size 3" x 4" Location BOTTOM SHELL, F/R HEAD

16. Fusible Plug (if used) NONE (No., Diameter, Location, and Mfr's. Certification Mark)

17. Boiler Supports: No. 2 Type SADDLES (Saddles, Legs, or Lugs) Attachment WELDED (Bolted or Welded)

18. MAWP 150 psi Based On PG-27 (Code Para. and/or Formula) Heating Surface 750 sq. ft. (Total)

19. Shop Hydrostatic Test 225 psi 20. Maximum Designed Steaming Capacity 5175

21. Remarks

OTHER PARTS:

*SPARE - (1) 1-1/4", 3000# THREADED CPLG., SA-105, WELDED TOP SHELL
*HI-WATER/LWCO - (5) 1", 3000# THREADED CPLGS., SA-105, WELDED TOP & SIDE SHELL
SPARE - (1) 3" 3000# THREADED CPLG., SA-105, WELDED TOP SHELL
REPAD - (1) 5/16" THICKNESS SA-516-70 PLATE, WELDED TOP SHELL @ STEAM SUPPLY

*SEE P-6 FOR BOILER EXTERNAL PIPING

Additional Remarks - See Attached P-6...

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this data report are correct and that all details of design, material, construction, and workmanship of this boiler conform to Section I of the ASME BOILER AND PRESSURE VESSEL CODE.

Our Certificate of Authorization no. 17222 to use the (S) S Designator expires January 6, 2018

Date 03/13/2015 Signed _____ (Authorized Representative) Name Hurst Boiler & Welding Co., Inc. (Manufacturer)

CERTIFICATE OF SHOP INSPECTION

Boiler constructed by Hurst Boiler & Welding Co., Inc. at 21971 U.S. Hwy 319 North, Coolidge, Georgia, 31738

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by OneCIS Insurance Company have inspected parts of this boiler referred to as data items 4-21 and have examined the Manufacturer's Partial Data Reports for items _____ and state that, to the best of my knowledge and belief, the manufacturer has constructed this boiler in accordance with Section I of the ASME BOILER AND PRESSURE VESSEL CODE. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the boiler described in this Manufacturer's Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury o ... ig from or connected with this inspection.

Date 03/13/2015 Signed _____ (Authorized Inspector) Commission 13637A (National Board Commission Number and Endorsement)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this boiler conforms with the requirements of SECTION I of the ASME BOILER AND PRESSURE VESSEL CODE.

Our Certificate of Authorization no. _____ to use the (A) or (S) _____ Designator expires _____

Date _____ Signed _____ (Authorized Representative) Name _____ (Assembler)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by _____

have compared statements in this Manufacturer's Data Report with the described boiler and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that, to the best of my knowledge and belief, the manufacturer and/or the assembler has constructed and assembled this boiler in accordance with the applicable sections of the ASME BOILER AND PRESSURE VESSEL CODE. The described boiler was inspected and subjected to a hydrostatic test of _____. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the boiler described in this Manufacturer's Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ Signed _____ (Authorized Inspector) Commission _____ (National Board Commission Number and Endorsement)

Form and version: P2-10

FORM P-7

N/A	S750-150-250	R1358.5	1400632B2	20405
(P-7 ID no.)	(Mfr's. Serial No.)	(CRN)	(Drawing No.)	(Nat'l. Board No.)

CERTIFICATE OF COMPLIANCE

We certify the statements of this Manufacturer's Data Report for Pressure Relief Valves to be correct and that all details conform to Section I of the ASME BOILER AND PRESSURE VESSEL CODE.

Our Certificate of Authorization No. 17222 to use the (S) or (M) S Designator expires 01/06/2018 .

Date 03/13/2015 Signed _____ Name Hurst Boiler & Welding Co., Inc.
(Authorized Representative) (Manufacturer)