

[Issuance Date]

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(****)

06-E CAB
File No. 0620

Mr. William M. Maloney
Managing Director
Kauai Ethanol, LLC
P. O. Box 330100
Kahului, Hawaii 96733

Dear Mr. Maloney:

Subject: Covered Source Permit (CSP) No. 0620-01-C
Initial Covered Source Permit Application No. 0620-01
Kauai Ethanol, LLC
12-Million Gallon per Year Ethanol Plant
Located at TMK: 1-7-06-1, Kaunakani, Kauai
Date of Expiration: [Five Year Period from Issuance Date]

The subject Covered Source Permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and additional information that you submitted as part of your application dated March 31, 2006 and the additional information dated May 12, 2006, June 7, 2006, July 11, 2006, July 20, 2006, September 12, 2006, and October 9, 2006.

The Covered Source Permit is issued subject to the conditions/requirements set forth in the following attachments:

Attachment I:	Standard Conditions
Attachment IIA:	Special Conditions for the SOCOMI Operations
Attachment IIB:	Special Conditions for the Boiler
Attachment IIC:	Special Conditions for the Tank Truck Load Rack
Attachment IID:	Special Conditions for the Diesel Engine Generator and Diesel Engine Fire Pump
Attachment IIE:	Special Conditions for the Cooling Tower
Attachment II - INSIG:	Special Conditions for Insignificant Activities
Attachment III:	Annual Fee Requirements
Attachment IV:	Annual Emissions Reporting Requirements

Mr. William M. Maloney
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The following forms are enclosed for your use and submittal as required:

Compliance Certification Form
Annual Emissions Report Form - Boilers
Annual Emissions Report Form - Carbon Dioxide Scrubber
Annual Emissions Report Form - Ethanol Scrubber

Annual Emissions/Monitoring Report Form - Cooling Tower
Annual Emissions/Monitoring Report Form - Tank Truck Load Rack
Annual Emissions/Monitoring Report Form - Fuel Oil No. 2 Consumption - Diesel Engine Generator

Monitoring Report Form - Operating Hours - Diesel Engine Fire Pump
Monitoring Report Form - Coal Consumption - Boiler
Monitoring Report Form - Fuel Oil No. 2 Consumption - Boiler
Monitoring Report Form - Spec Used Oil Consumption - Boiler
Monitoring Report Form - Operating Hours - Boiler
Monitoring Report Form - Visible Emissions

Excess Emission and Monitoring System Performance Summary Report
Visible Emissions Form

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, 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.

Sincerely,

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

SS:jhm

Enclosures

c: Rodney Yama, EHS – Kauai
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

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 of Health, 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 of Health.

(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 of Health 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 the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, 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 of Health 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 of Health 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 of Health 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 of Health 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 of Health 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 Health 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 of Health 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 of Health.

(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 of Health, 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 the facility covered by this permit**, the discontinuance shall be reported in writing to the Department of Health 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 of Health and the U.S. EPA Region 9 no less than twelve months and no more than eighteen months prior to the permit expiration date. The director may allow a permit renewal application to be submitted no less than six 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 of Health 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:**

**Clean Air Branch
Environmental Management Division
State of Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378**

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

**Chief
Permits Office, (Attention: Air-3)
Air Division
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
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 FOR THE SOCMI OPERATIONS
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This attachment encompasses the following equipment and associated appurtenances:
 - a. Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this attachment.
 - b. One (1) Praj Industries Carbon Dioxide Scrubber with six (6) sieve trays.
 - c. One (1) Praj Industries Ethanol Scrubber with eight (8) sieve trays.

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed above which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

The ethanol plant is subject to the provisions of the following federal regulations:

1. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
2. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

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, §11-60.1-161; 40 CFR §60.1, §60.480)¹

Section C. Operational Limitations

1. The permittee shall demonstrate compliance with the requirements of Special Condition Nos. C.1 through C.12 of this attachment for all equipment within one-hundred eighty (180) days of initial startup.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.482-1)¹

2. Compliance with Special Condition Nos. C.1. through C.12 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in Section F. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.482-1)¹

3. Equipment that is in vacuum service is excluded from the requirements of Special Condition Nos. C.4 through C.12. of this attachment if it is identified as required in Special Condition Nos. D.4.e. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.482-1)¹

4. Pumps in Light Liquid Service

- a. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Special Condition No. F.4. of this attachment, except as provided in Special Condition Nos. C.13.a. and C.4.e., f., and g., of this attachment.

- b. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

- c. A leak is detected when:

- i. An instrument reading of 10,000 ppm or greater is measured; or
- ii. There are indications of liquids dripping from the pump seal.

- 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.11. of this attachment. The first attempt at the repair shall be made no later than five (5) calendar days after each leak is detected.

- e. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Special Condition Nos. C.4.a and b. of this attachment, provided the following requirements are met:

- i. Each dual mechanical seal system is:

- (1) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
 - (2) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Special Condition No. C.12. of this attachment; or
 - (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- ii. The barrier fluid system is in heavy liquid service or is not in VOC service;
 - iii. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both;
 - iv. Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals;
 - v. Each sensor as described in Special Condition No. C.4.e.iii of this attachment is checked daily or is equipped with an audible alarm, and the permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both; and
 - vi. Detected Leak
 - (1) A leak is detected by indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in Special Condition No. C.4.e.v. of this attachment.
 - (2) The leak 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.11. of this attachment.
 - (3) The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
- f. Any pump that is designated, as described in Special Condition Nos. D.4.a. and b. of this attachment, for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Special Condition Nos. C.4.a., d., and e. 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 Special Condition No. F.5. of this attachment; and
 - iii. Is tested for compliance with Special Condition No. C.4.f.ii. of this attachment initially upon designation, annually, and at other times requested by the Department of Health and/or the U.S. EPA.
- g. If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of Special Condition No. C.12. of this attachment, it is exempt from Special Condition Nos. C.4.a. through f. of this attachment.
- h. Any pump that is designated, as described in 40 CFR §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of Special Condition Nos. C.4.a., C.4.e.iv. through vi. of this attachment if:
- i. The permittee of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Special Condition No. C.4.a. of this attachment; and
 - ii. The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in Special Condition No. C.4.c. of this attachment if a leak is detected.
- i. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of Special Condition Nos. C.4.b. and C.4.e.iv. of this attachment, and the daily requirements of Special Condition No. C.4.e.v. of this attachment, provided that each pump is visually inspected as often as practicable and at least monthly.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.482-2)¹

5. Compressors

- a. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in Special Condition Nos. C.13.a., C.5.h., and C.5.i. of this attachment.

- b. Each compressor seal system as required in Special Condition No. C.5.a. of this attachment shall be:
 - 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 degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Special Condition No. C.12. of this attachment; 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. Each barrier fluid system as described in Special Condition No. C.5.a. of this attachment shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- e. Each sensor as required in Special Condition No. C.5.d. of this attachment shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- f. A leak is detected if the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under Special Condition No. C.5.e. of this attachment.
- g. 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.11. of this attachment. The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
- h. A compressor is exempt from the requirements of Special Condition Nos. C.5.a. and b. of this attachment, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of Special Condition No. C.12. of this attachment, except as provided in Special Condition No. C.5.i. of this attachment.
- i. Any compressor that is designated, as described in Special Condition Nos. D.4.a. and b. of this attachment, 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. C.5.a. through h. of this attachment if the compressor:

- i. 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 Special Condition No. F.5. of this attachment; and
- ii. Is tested for compliance with Special Condition No. C.5.i.i. of this attachment initially upon designation, annually, and at other times requested by the Department of Health and/or the U.S. EPA.
- j. Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR §60.14 or §60.15 is exempt from Special Condition Nos. C.5.a., b., c., d., e., and h., provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of Special Condition Nos. C.5.a. through e. and C.5.h. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-3)¹

6. Pressure Relief Devices in Gas/Vapor Service

- a. Except during pressure releases, each pressure relief device in gas/vapor service 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 Special Condition No. F.5. of this attachment.
- 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.11. of this attachment.
- c. No later than five (5) calendar days after the pressure release, the pressure relief device 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 Special Condition No. F.5. of this attachment.
- d. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in Special Condition No. C.12. of this attachment is exempt from the requirements of Special Condition Nos. C.6.a. through c. of this attachment.
- e. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Special Condition Nos. C.6.a. through c. of this attachment, provided the permittee complies with the requirements in Special Condition No. C.6.f. of this attachment.

- f. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than five (5) calendar days after each pressure release, except as provided in Special Condition No. C.11. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-4)¹

7. Sampling Connection Systems

- a. Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in Special Condition No. C.7.c. of this attachment. Gases displaced during filling of the sample container are not required to be collected or captured.
- b. Each closed-purge, closed-loop, or closed-vent system as required in Special Condition No. C.7.a. of this attachment shall comply with one of 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 Special Condition No. C.12. of this attachment; or
 - iv. Collect, store, and transport the purged process fluid to any of the following systems or facilities:
 - (1) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR Part 63, Subpart G, applicable to Group 1 wastewater streams;
 - (2) A treatment, storage, or disposal facility subject to regulation under 40 CFR Parts 262, 264, 265, or 266; or
 - (3) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261.
- c. In situ sampling systems and sampling systems without purges are exempt from the requirements of Special Condition Nos. C.7.a. and b. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-5)¹

8. Open-ended Valves or Lines

- a. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in Special Condition No. C.8.c. of this attachment. 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.8.a. of this attachment at all other times.
- d. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of Special Condition Nos. C.8.a. through c. of this attachment.
- e. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in Special Condition Nos. C.8.a. through c. of this attachment are exempt from the requirements of Special Condition Nos. C.8.a. through c. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-6)¹

9. Valves in gas/vapor service and in light liquid service

- a. Each valve shall be monitored monthly to detect leaks by the methods specified in Special Condition No. F.4. of this attachment and shall comply with Special Condition Nos. C.9.b. through e. of this attachment, except as provided in Special Condition Nos. C.9.f., g., and h., and C.13.a., c., and d. of this attachment.
- b. A leak is detected if an instrument reading of 10,000 ppm or greater is measured.
- 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 2 successive months.
- d. When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in Special Condition No. C.11. of this attachment. The 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;
 - iv. Injection of lubricant into lubricated packing.

- f. Any valve that is designated, as described in Special Condition No. D.4.b. of this attachment, 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. C.10.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 Special Condition No. F.5. of this attachment; and
 - iii. Is tested for compliance with Special Condition No. C.9.f.ii. of this attachment initially upon designation, annually, and at other times requested by the Department of Health and/or the U.S. EPA.

- g. Any valve that is designated, as described in Special Condition No. D.5.a. of this attachment, as an unsafe-to-monitor valve is exempt from the requirements of Special Condition No. C.9.a. of this attachment if:
 - i. The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Special Condition No. C.9.a. of this attachment; and
 - ii. The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

- h. Any valve that is designated, as described in Special Condition No. D.5.b. of this attachment, as a difficult-to-monitor valve is exempt from the requirements of Special Condition No. C.9.a. of this attachment if:
 - i. The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
 - ii. The process unit within which the valve is located either becomes an affected facility through 40 CFR §60.14 or §60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

- iii. The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-7)¹

10. Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors

- a. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:
 - i. The permittee shall monitor the equipment within five (5) days by the method specified in Special Condition No. F.4. of this attachment and shall comply with the requirements of Special Condition No. C.10.b through d. of this attachment.
 - ii. The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
- b. A leak is detected if an instrument reading of 10,000 ppm or greater is measured.
- 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.11. 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 under Special Condition No. C.9.e. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-8)¹

11. Delay of Repair

- a. Delay of repair of equipment for which leaks have been detected will be allowed if repair within fifteen (15) days 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 immediate repair are greater than the fugitive emissions likely to result from 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 Special Condition No. C.12. of this attachment.
- 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 §60.482-9)¹

12. Closed Vent Systems and Control Devices

- a. Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.
- b. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
- c. Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.
- d. Flares used to comply with this subpart shall comply with the requirements of 40 CFR §60.18.
- e. Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
- f. Except as provided in Special Condition Nos. C.12.i., j., and k. of this attachment, each closed vent system shall be inspected according to the following procedures and schedule.

- i. If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the following requirements:
 - (1) Conduct an initial inspection according to the procedures in Special Condition No. F.4. of this attachment; and
 - (2) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
- ii. If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall conduct the initial and annual inspections according to the procedures in Special Condition No. F.4. of this attachment.
- g. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in Special Condition No. C.12.h. of this attachment. The first attempt at repair shall be made no later than five (5) calendar days after the leak is detected. Repair shall be completed no later than fifteen (15) calendar days after the leak is detected.
- h. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- i. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of Special Condition Nos. C.12.f.i.(1) and C.12.f.ii. of this attachment.
- j. Any parts of the closed vent system that are designated, as described in Special Condition No. C.12.l.i. of this attachment, as unsafe to inspect are exempt from the inspection requirements of Special Condition Nos. C.12.f.i.(1) and C.12.f.ii. of this attachment if they comply with the following requirements:
 - i. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Special Condition Nos. C.12.f.i.(1) and C.12.f.ii. of this attachment; and
 - ii. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- k. Any parts of the closed vent system that are designated, as described in Special Condition No. C.12.l.ii. of this attachment, as difficult to inspect are exempt from the inspection requirements of Special Condition Nos. C.12.f.i.(1) and C.12.f.ii. of this attachment if they comply with the following requirements:

- i. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two (2) meters above a support surface;
 - ii. The process unit within which the closed vent system is located becomes an affected facility through 40 CFR §60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
 - iii. The permittee has a written plan that requires inspection of the equipment at least once every five (5) years. A closed vent system is exempt from inspection if it is operated under a vacuum.
- I. The permittee shall record the following information:
- i. Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment;
 - ii. Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment;
 - iii. For each inspection during which a leak is detected, a record of the information specified in Special Condition No. D.2. of this attachment;
 - iv. For each inspection conducted in accordance with Special Condition No. F.4. of this attachment during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and
 - v. For each visual inspection conducted in accordance with Special Condition No. C.12.f.i.(2) of this attachment during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- m. Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.482-10)¹

13. Alternate Operating Scenarios

- a. The permittee may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, and 60.482-10 as provided below.
 - i. The permittee may apply to the U.S. EPA for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this attachment.
 - ii. Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:
 - (1) Each permittee applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.
 - (2) The U.S. EPA will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.
 - (3) The U.S. EPA may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.
 - iii. Determination of equivalence to the required work practices in this attachment will be evaluated by the following guidelines:
 - (1) Each permittee applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.
 - (2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.
 - (3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.
 - (4) Each permittee applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

- (5) The U.S. EPA will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in Special Condition No. C.13.a.iii.(4) of this attachment.
- (6) The U.S. EPA may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.
- iv. The permittee may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.
- v. After a request for determination of equivalence is received, the U.S. EPA will publish a notice in the Federal Register and provide the opportunity for public hearing if the U.S. EPA judges that the request may be approved.

After notice and opportunity for public hearing, the U.S. EPA will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.

Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

- vi. Manufacturers of equipment used to control equipment leaks of VOC may apply to the U.S. EPA for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

The U.S. EPA will make an equivalence determination according to the provisions of Special Condition Nos. C.13.a.ii. through v. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.484)¹

- b. If the U.S. EPA makes a determination that a means of emission limitation is at least equivalent to the requirements of Special Condition Nos. C.4, C.5., C.7., C.8., C.9., C.10., or C.12. of this attachment, the permittee shall comply with the requirements of that determination.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.482-1, §60.484)¹

- c. Allowable Percentage of Valves Leaking

- i. The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

- ii. The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:
 - (1) The permittee must notify the U.S. EPA that the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in Special Condition No. E.7. of this attachment.
 - (2) A performance test as specified in Special Condition No. C.13.c.iii. of this attachment shall be conducted initially upon designation, annually, and at other times requested by the U.S. EPA.
 - (3) If a valve leak is detected, it shall be repaired in accordance with Special Condition No. C.9.d. and e. of this attachment.
- iii. Performance tests shall be conducted in the following manner:
 - (1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within one (1) week by the methods specified in Special Condition No. F.4. of this attachment;
 - (2) A leak is detected if an instrument reading of 10,000 ppm or greater is measured; and
 - (3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.
- iv. If the permittee elects to comply with this alternative standard, the permittee shall not have an affected facility with a leak percentage greater than 2.0 percent.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.483-1)¹

d. Skip Period Leak Detection and Repair

- i. The permittee may elect to comply with one of the alternative work practices specified in Special Condition Nos. C.13.d.iii. and iv. of this attachment. The permittee must notify the U.S. EPA before implementing one of the alternative work practices, as specified in Special Condition No. E.7. of this attachment.
- ii. The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in Special Condition No. C.9. of this attachment.

- iii. After two (2) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- iv. After five (5) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- v. If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in Special Condition No. C.9. of this attachment but can again elect to use this section.
- vi. The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.
- vi.. The permittee must keep a record of the percent of valves found leaking during each leak detection period.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.483-2)¹

14. Odor Control

The permittee shall take measures to capture or contain nuisance odors at the source. The Department of Health may at any time require the permittee to use additional means and methods to further capture and contain nuisance odors if an inspection indicates poor or insufficient control.

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

Section D. Monitoring and Recordkeeping Requirements

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 in a permanent form suitable for inspection and shall be made available to the Department of Health or their representative upon request.

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

1. When each leak is detected as specified in Special Condition Nos. C.4., C.5., C.9., C.10., and C.13.d. of this attachment, the following requirements apply:

- a. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment;
- b. The identification on a valve may be removed after it has been monitored for two (2) successive months as specified in Special Condition No. C.9.c. of this attachment and no leak has been detected during those two (2) months; and
- c. The identification on equipment except on 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 §60.486)¹

2. When each leak is detected as specified in Special Condition Nos. C.4., C.5., C.9., C.10., and C.13.d. of this attachment, the following information shall be recorded in a log and shall be kept for in a readily accessible location:

- a. The instrument and operator identification numbers and the equipment identification number.
- b. The date the leak was detected and the dates of each attempt to repair the leak.
- c. Repair methods applied in each attempt to repair the leak.
- d. "Above 10,000" if the maximum instrument reading measured by the methods specified in Special Condition No. F.2. of this attachment after each repair attempt is equal to or greater than 10,000 ppm.
- e. "Repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) calendar days after discovery of the leak.
- f. The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
- g. The expected date of successful repair of the leak if a leak is not repaired within fifteen (15) days.
- h. Dates of process unit shutdowns that occur while the equipment is unrepaired.
- i. The date of successful repair of the leak.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.486)¹

3. The following information pertaining to the design requirements for closed vent systems and control devices described in Special Condition No. C.12. of this attachment shall be recorded and kept in a readily accessible location:

- a. Detailed schematics, design specifications, and piping and instrumentation diagrams.
- b. The dates and descriptions of any changes in the design specifications.
- c. A description of the parameter or parameters monitored, as required in Special Condition No. C.12.e. of this attachment, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
- d. Periods when the closed vent systems and control devices required in Special Condition Nos. C.4., C.5., C.6., and C.7. of this attachment are not operated as designed.
- e. Dates of startups and shutdowns of the closed vent systems and control devices required in Special Condition Nos. C.4., C.5., C.6., and C.7. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.486)¹

4. The following information pertaining to all equipment subject to the requirements in Special Condition Nos. C.1. through C.13. of this attachment shall be recorded in a log that is kept in a readily accessible location:
 - a. A list of identification numbers for equipment subject to the requirements of this attachment.
 - b. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of Special Condition Nos. C.4.f., C.5.i., and C.9.f. of this attachment. The designation of equipment as subject to the requirements of Special Condition Nos. C.4.f., C.5.i., and C.9.f. of this attachment shall be signed by the Responsible Official.
 - c. A list of equipment identification numbers for pressure relief devices required to comply with Special Condition No. C.6. of this attachment.
 - d. For the compliance tests required in Special Condition Nos. C.4.f., C.5.i., C.6., and C.9.f. of this attachment:
 - i. The date of each compliance test.
 - ii. The background level measured during each compliance test.
 - iii. 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 §60.486)¹

5. The following information pertaining to all valves subject to the requirements of Special Condition Nos. C.9.g. and C.9.h. of this attachment and to all pumps subject to the requirements of Special Condition No. C.4.h. of this attachment shall be recorded in a log that is kept in a readily accessible location:
- a. A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - 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 §60.486)¹
6. The following information shall be recorded for valves complying with Special Condition No. C.13.d. of this attachment:
- a. A schedule of monitoring.
 - b. The percent of valves found leaking during each monitoring period.
- (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.486)¹
7. The following information shall be recorded in a log that is kept in a readily accessible location:
- a. Design criterion required in Special Condition Nos. C.4.e.v. and C.5.e. of this attachment and explanation of the design criterion; and
 - 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 §60.486)¹
8. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR §60.480(d):
- a. An analysis demonstrating the design capacity of the affected facility;
 - b. A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and
 - c. An analysis demonstrating that equipment is not in VOC service.
- (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.486)¹

9. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.486)¹

10. The provision of 40 CFR §60.7 (b) do not apply to the affected facilities subject to this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.486)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 No. Nos. 14, 16, 17, and 24, respectively:

- a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup.
- b. Intent to shut down 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; SIP §11-60-10; SIP §11-60-16; 40CFR §60.48c)^{1, 2}

2. Deviations

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

During the permit term, the permittee shall submit at least annually to the Department of Health and USEPA 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:

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

The compliance certification shall be submitted within ninety (90) days after the end of each calendar year, and shall be signed and dated by a responsible official.

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

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

4. The permittee shall submit semiannual reports to the Department of Health and the U.S. EPA beginning six (6) months after the initial startup date.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.487)¹

5. The initial semiannual report to the Department of Health and the U.S. EPA shall include the following information:

- a. Process unit identification.

- b. Number of valves subject to the requirements of Special Condition No. C.9. of this attachment, excluding those valves designated for no detectable emissions under the provisions of Special Condition No. C.9.f. of this attachment.
- c. Number of pumps subject to the requirements of Special Condition No. C.4. of this attachment, excluding those pumps designated for no detectable emissions under the provisions of Special Condition No. C.4.f. of this attachment and those pumps complying with Special Condition No. C.4.g. of this attachment.
- d. Number of compressors subject to the requirements of Special Condition No. C.5. of this attachment, excluding those compressors designated for no detectable emissions under the provisions of Special Condition No. C.5.i. of this attachment and those compressors complying with Special Condition No. C.5.h. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.487)¹

- 6. All semiannual reports to the Department of Health and the U.S. EPA shall include the following information, summarized from the information in Special Condition Nos. D.1. through D.10. of this attachment:
 - a. Process unit identification.
 - b. For each month during the semiannual reporting period,
 - i. Number of valves for which leaks were detected as described in Special Condition No. C.9.b. of this attachment or Special Condition No. C.13.d. of this attachment;
 - ii. Number of valves for which leaks were not repaired as required in Special Condition No. C.9.d. of this attachment;
 - iii. Number of pumps for which leaks were detected as described in Special Condition Nos. C.4.c. and C.e.i. of this attachment;
 - iv. Number of pumps for which leaks were not repaired as required in Special Condition No. C.4.d. and C.4.e.i. of this attachment;
 - v. Number of compressors for which leaks were detected as described in Special Condition No. C.5.f. of this attachment;
 - vi. Number of compressors for which leaks were not repaired as required in Special Condition No. C.5.g. of this attachment; 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.
- d. Revisions to items reported according to Special Condition No. E.5. of this attachment 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 §60.487)¹

- 7. The permittee electing to comply with the provisions of Special Condition No. C.13.c. or C.13.d. of this attachment shall notify the Department of Health and the U.S. EPA of the alternative standard selected ninety (90) days before implementing either of the provisions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.487)¹

- 8. The permittee shall report the results of all performance tests in accordance with 40 CFR §60.8 of the General Provisions. The provisions of 40 CFR §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify the Department of Health and the U.S. EPA of the schedule for the initial performance tests at least thirty (30) days before the initial performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.487)¹

- 9. The requirements of Special Condition Nos. E.4. through 6. of this attachment remain in force until and unless the U.S. EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of Special Condition Nos. E.4. through 6. of this attachment, provided that they comply with the requirements established by the State.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.487)¹

- 10. Annual Emissions

As required by *Attachment IV, Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III, Annual Fee Requirements*, the permittee shall report **annually** the total tons/year emitted of each regulated air pollutant, including any hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The enclosed *Annual Emissions Report Forms: Carbon Dioxide Scrubber* and *Ethanol Scrubber* or equivalent forms shall be used in reporting emissions.

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

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

Section F. Testing Requirements

1. **Within sixty (60) days** after achieving the maximum production rate of the SOCM I operations but not later than one-hundred eighty (180) days after the initial start-up as defined in 40 CFR Part 60.2., the permittee shall conduct or cause to be conducted performance tests on the carbon dioxide scrubber and the ethanol scrubber. The performance test shall be conducted for volatile organic compounds (VOC) using 40 CFR Part 60, Methods 1-4 and 25.

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

2. **Within sixty (60) days** after achieving the maximum production rate of the SOCM I operations but not later than one-hundred eighty (180) days after the initial start-up as defined in 40 CFR Part 60.2., the permittee shall conduct or cause to be conducted performance tests on the SOCM I operations. In conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in this section, except as provided in 40 CFR §60.8(b).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.8, §60.485)¹

3. On an annual basis or at other such times as may be specified by the Department, the permittee shall conduct or cause to be conducted a source performance tests on the carbon dioxide scrubber, the ethanol scrubber, and the SOCM I operations. The performance test on the carbon dioxide scrubber and the ethanol scrubber shall be conducted for volatile organic compounds (VOC) using 40 CFR Part 60, Methods 1-4 and 25. The performance test on the SOCM I operations shall be conducted using the methods and procedures of 40 CFR Part 60 Appendix A and the methods and procedures of this section.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.8, §60.485)¹

4. The permittee shall determine compliance with the standards in Special Condition Nos. C.1. through C.12, C.13.a., C.13.c., C.13.d. of this attachment as follows:
 - a. Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

- 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 about, but less than, 10,000 ppm methane or n-hexane.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.485)¹

5. The permittee shall determine compliance with the no detectable emission standards in Special Condition Nos. C.4.f., C.5.i., C.6., C.9.f., and C.12.e of this attachment as follows:
 - a. The requirements of Special Condition No. F.4. of this attachment shall apply.
 - b. Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.485)¹

6. The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
 - a. Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
 - b. Organic compounds that are considered by the U.S. EPA to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
 - c. Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the U.S. EPA disagrees with the judgment, Special Condition Nos. F.6.a. and b. of this attachment shall be used to resolve the disagreement.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.485)¹

7. The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

- a. The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the vapor pressures;
- b. The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F) is equal to or greater than 20 percent by weight; and
- c. The fluid is a liquid at operating conditions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.485)¹

8. Samples used in conjunction with Special Condition Nos. F.6. and F.7. of this attachment shall be representative of the process fluid that is contained in or contacts the equipment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.485)¹

Section G. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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 pre-construction 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 FOR THE BOILER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This attachment encompasses the following equipment and associated appurtenances:
 - a. One (1) 70 MMBtu/hr stoker-fired steam boiler, Alpha Boilers Inc., model Alpha ATT 25-27 MP, with lime injection system.
 - b. Air Pollution Control Equipment for the Boiler:
 - 1) Limestone injection system;
 - 2) Selective non-catalytic reduction (SNCR) with a urea injection system;
 - 3) One 2,500 gallon urea storage tank; and
 - 3) Baghouse

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed above which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

The boiler is subject to the provisions of the following federal regulations:

1. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
2. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

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, §11-60.1-161; 40 CFR §60.1, §60.40c)¹

Section C. Operational and Emission Limitations

1. The boiler shall be properly maintained and kept in good operating condition at all times. The permittee shall follow a regular maintenance schedule, as recommended by the manufacturer or as needed, to ensure proper operation of the boilers.

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

2. The boiler may be fired on any of the following fuels:

- a. Coal

- i. The maximum sulfur content of the coal shall not to exceed 0.5 percent by weight.
- ii. The consumption of coal shall not exceed 25,080 tons in any rolling 12-month period.

- b. Fuel oil no. 2

- i. The maximum sulfur content of fuel oil no. 2 shall not exceed 0.4 percent by weight.
- ii. The consumption of fuel oil no. 2 shall not exceed 3,374,614 gallons in any rolling 12-month period.

- c. Specification (Spec) Used Oil

- i. The following constituents/properties of the spec used oil shall not exceed the specified allowable limit listed below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Sulfur	0.5% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	<2 ppm

- ii. The consumption of spec used oil shall not exceed 1,181,110 gallons in any rolling 12-month period. The total combined consumption of spec used oil and fuel oil no. 2 shall not exceed 3,374,614 gallons in any rolling 12-month period.

- iii. A sample from each shipment of spec used oil shall be analyzed for compliance with the limits in Attachment IIB, Special Condition No. C.2.c.i. prior to being burned. Each of these samples shall:
- 1) Represent no more than 5,000 gallons of used oil;
 - 2) Be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/properties for which limits are given in Attachment IIB, Special Condition No. C.2.c.i.; and
 - 3) Have a laboratory analysis and report detailing the constituents/properties for which limits are given in Attachment IIB, Special Condition No. C.2.c.i. The permit conditions prescribed herein may at any time be revised by the Department of Health to reflect federal or state promulgated rules on used oil.
- iv. Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Attachment IIB, Special Condition No. C.2.c.i. is allowable only for spec used oil that was not deemed hazardous.
- v. The spec used oil shall be obtained only from the following sources.
- 1) Unitek Solvent Services, Inc.;
 - 2) Pacific Environmental Corp.;
 - 3) On-Site Vacuum Service, Inc.;
 - 4) Pacific Missile Range Facility/ITT Industries;
 - 5) Senter Petroleum;
 - 6) Philip Services Hawaii, Ltd.; and
 - 7) Gay and Robinson, Inc.
- Spec used oil may be obtained from other sources provided the source is approved by the Department of Health. A written request identifying a spec used oil source shall be submitted to the Department of Health for approval prior to the acceptance of any spec used oil.
- vi. This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if declared or determined to be a hazardous waste.
- vii. This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing, and burning of used oil.

viii. The permit conditions prescribed herein may at any time be revised by the Department of Health to reflect federal or state promulgated rules on used oil.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-140, 40 CFR §279.11)¹

3. Maximum Heat Input

a. Firing on Coal

The maximum heat input into the boiler while firing on coal shall not exceed 70 MMBtu/hr except as follows. The heat input into the boiler may exceed 70 MMBtu/hr, but shall not exceed 77 MMBtu/hr, for a cumulative time period not longer than three hours in any 24-hour period.

b. Firing on Fuel Oil No. 2, Spec Used Oil, and/or Waste Ethanol

The maximum heat input into the boiler while firing on fuel oil no.2, spec used oil, and/or waste ethanol shall not exceed 55.3 MMBtu/hr.

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

4. Operating Hours

The total operating hours of the boiler shall not exceed 8,360 hours in any 12-month period.

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

5. Air Pollution Control Equipment

The permittee shall continuously operate and maintain the following air pollution controls to meet the emissions limits as specified in Attachment IIB, Special Condition No. D.1. The following controls shall be fully operational upon startup and thereafter:

- a. A limestone injection system shall be used to meet the sulfur dioxide emission limits (3-hour average) as specified in Attachment IIB, Special Condition No. D.1.
- b. A SNCR system with a urea injection system shall be used to meet the nitrogen oxide emission limit (3-hour average) as specified in Attachment IIB, Special Condition No. D.1.
- c. A baghouse shall be used to meet the particulate matter and lead emission limits (3-hour average) as specified in Attachment IIB, Special Condition No. D.1.
 - i. The permittee shall follow a regular maintenance schedule to ensure the following items of the baghouse are operating properly:

- 1) The filter bags shall be checked for any tears, holes, abrasions, and scuffs at regular intervals; and replaced as needed;
- 2) The hoppers shall be discharged in a timely manner to prevent excessive particulate buildup which could cause compaction, overflow or plugging;
- 3) The cleaning systems shall be maintained and operated at sufficient intervals to minimize particulate buildup or caking on the filter bags; and
- 4) Other miscellaneous items/equipment essential for the effective operation of the baghouse shall be maintained at regular intervals.

ii. The baghouse shall be operated at all times during boiler operations.

- d. The air pollution control equipment shall be properly maintained and kept in good operating condition at all times with scheduled inspections and maintenance as recommended by the manufacturer or as needed to meet the emission limits as shown in Attachment IIB, Special Condition No. D.1.

(Auth.: HAR §11-60.1-3, §11-60.1-5, HAR §11-60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR §60.42a, 40 CFR §60.43a, 40 CFR §68)¹

6. Fugitive Emissions

- a. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, etc.) at all material transfer points, stockpiles, and throughout the facility. The Department of Health may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- b. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions or fugitive dust beyond the lot line of the property on which the emissions originate.
- c. Potential sources of fugitive emissions in the fuel oil and spec used oil transfer and storage systems shall be inspected and maintained on a regular schedule to control VOC emissions.
- d. The permittee shall maintain records of inspections to the fuel oil and spec used oil transfer and storage systems as part of the operational log. The permittee shall provide the Department of Health with copies of the log upon request.

- e. The permittee shall provide access to the Department of Health to inspect all potential sources of fugitive emissions. These source include, but are not limited to tank welds, tank seams, gauge hatches, sampling ports, pressure relief valves, conveyors, and storage vessels.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-33, §11-60.1-90)

Section D. Emission Limitations

1. Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the boiler nitrogen oxides, sulfur dioxide, particulate matter/PM₁₀, carbon monoxide, volatile organic compounds, and ammonia in excess of the following specified limits:

Maximum Emission Limits While Firing on Coal

Compound	Maximum Emission Limit (3-hour Average)	
	lb/hr	ppmvd @3% O ₂
<u>Nitrogen Oxides as NO₂</u>		
Continuous Load	18.9	238.6
Peak Load (77 MMBtu/hr)	20.8	262.4
<u>Sulfur Dioxide</u>		
Continuous Load	19.6	146.9
Peak Load (77 MMBtu/hr)	21.6	161.6
<u>Particulate Matter/PM₁₀</u>		gr/dscf @12% CO ₂
Continuous Load	3.57	0.030
Peak Load (77 MMBtu/hr)	3.93	0.033
<u>Carbon Monoxide</u>		
Continuous Load	15	257.0
Peak Load (77 MMBtu/hr)	16.5	282.7
<u>Volatile Organic Compounds as C₃H₈</u>		
Continuous Load	3.0	89.7
Peak Load(77 MMBtu/hr)	3.3	98.7
<u>Ammonia</u>		
Continuous Load	0.7	20.0
Peak Load (77 MMBtu/hr)	0.8	22.0

Maximum Emission Limits While Firing on Fuel Oil, Spec Used Oil, and Waste Ethanol

Compound	Maximum Emission Limit (3-hour Average)	
	lb/hr	ppmvd @3% O ₂
Nitrogen Oxides as NO ₂	14.9	249.8
Sulfur Dioxide	15.5	154.3
Particulate Matter/PM ₁₀	0.8	gr/dscf @12% CO ₂ 0.009
Carbon Monoxide	2.5	56.9
Volatile Organic Compounds as C ₃ H ₈	0.4	15.9
Ammonia	0.6	20.0

The Department of Health may revise the allowable emission limitation for nitrogen oxides, particulate matter, carbon monoxide, volatile organic compounds, and ammonia after reviewing the initial performance test results required under Attachment IIB, Section G of this Covered Source Permit.

If the nitrogen oxides, particulate matter, carbon monoxide, volatile organic compounds, or ammonia emission limit is revised, the difference between the applicable emission limit set forth above and the revised lower emission limit shall not be allowed as an emission offset for future construction or modification.

(Auth.: HAR §11-60.1-3, HAR §11-60.1-5, HAR §11-60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR §60.42a, 40 CFR §60.43a, 40 CFR §60.44a)¹

2. **Opacity of Stack Emissions**

The permittee shall not cause the discharge into the atmosphere emissions from the boiler's stack exhibiting an opacity of twenty (20) percent or greater (six-minute average), except for one six (6) minute period per hour of not more than twenty-seven (27) percent opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, 40 CFR §60.43c)¹

Section E. Monitoring and Recordkeeping Requirements

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 in a permanent form suitable for inspection and shall be made available to the Department of Health or their representative upon request.

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

1. Fuel Analysis Monitoring & Recordkeeping
 - a. Coal
 - i. The permittee shall maintain records of the sulfur content, moisture content, ash content, and heat content for each shipment of the coal fired in the boiler.
 - ii. The coal shall be tested in accordance with the most current American Society for Testing and Materials (ASTM) methods.
 - iii. At minimum, the records for each delivery of coal shall include the following:
 - (1) Name of the coal supplier
 - (2) Location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location.
 - (3) Name of the coal mine and coal seam, coal storage facility, or coal plant where the sample was collected.
 - (4) Results of the analysis from which the shipment came including the sulfur content, moisture content, ash content, and heat content.
 - (5) Means and methods used to determine the properties of the coal.

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

- b. Fuel Oil No. 2 and Spec Used Oil

The permittee shall maintain records of the fuel purchase receipts showing the supplier, fuel type, date of delivery, and amount (gallons) of fuel delivered. The permittee shall obtain a statement from the fuel supplier stating that the fuel complies with the specifications under the definition of distillate oil in 40 CFR §60.41c. The permittee shall also maintain records of the supplier's certificate of analysis showing the sulfur content of the fuel delivered and all test analysis. At a minimum, the test analysis shall include the following:

- i. Type of fuel;
- ii. Date and time the fuel sample was drawn;
- iii. Date the analyses were performed;
- iv. Name and address of the company or entity that performed the analyses;
- v. Means and methods used to analyze the fuel; and
- vi. Analysis results.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40CFR §60.44c, 40CFR §60.48c)¹

2. Fuel Consumption

The permittee shall maintain daily records of the total fuel consumption of the boiler. A monthly summary on the total quantity of fuel consumed by the boiler shall be maintained. The monthly summary shall include the total quantity of each type of fuel consumed for the month and the total quantity of fuel consumed on a rolling 12-month basis. The permittee shall calculate the annual capacity factor for each fuel combusted in the boiler at the end of each calendar month.

a. Coal

The permittee shall install, operate, and maintain a fuel measurement system for the continuous measurement and recording of the amount of coal being fired in the boiler. The coal consumption record shall be maintained on a daily basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40CFR §60.48c)¹

b. Fuel Oil No. 2 and Spec Used Oil

The permittee shall install, operate, and maintain non-resetting flow meters for the continuous measurement and recording of the amount of fuel oil no. 2 and spec used oil being fired in the boiler. Daily records of the beginning meter readings and the total daily fuel consumption shall be kept for each type of fuel.

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

3. Baghouse

The permittee shall install, operate, and maintain a pressure drop meter on the baghouse for continuous reading during operation. The permittee shall monitor this meter at least once daily during operation.

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

4. Inspection, Maintenance and Repair Log

An inspection, maintenance and repair log shall be maintained for the equipment covered under this permit. Replacement of parts and repairs to the boiler shall be documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/repair;
- b. A description of the findings or any maintenance or repair work performed; and
- c. The name and title of the inspector.

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

5. Continuous Emission Monitoring Systems (CEMS)

The permittee shall install, operate, maintain, and calibrate CEMS at the boiler exhaust streams to measure NO_x (as NO₂), SO₂, CO, and CO₂ or O₂ concentrations in the flue gas as follows:

- a. The CEMS shall be operated and data recorded during all periods of operation including periods of startup, shutdown, malfunction, or emergency conditions, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40CFR §60.46c)¹

- b. Emissions data shall be obtained for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. Each 1-hour average must be based on at least 30 minutes of operation and include at least 2 data points representing two 15-minute periods. If this minimum data requirement cannot be met with a CEMS, the permittee shall supplement emission data with other monitoring systems as approved by the Department of Health or the following:

- i. For SO₂, U.S. EPA Reference Method 6, 6A, 6B, or 6C shall be used;
- ii. For NO_x, U.S. EPA Reference Method 7, 7A, 7C, 7D or 7E shall be used;
- iii. For CO, U.S. EPA Reference Method 10 shall be used;
- iv. For O₂ or CO₂, U.S. EPA Reference Method 3, 3A, or 3B shall be used; and
- v. To compute each 1-hr average concentration in lb/MMBtu, EPA Reference Method 19 shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40CFR §60.46c(b), 40CFR §60.46c(f))¹

- c. The span value of the SO₂ CEMS at the exhaust stack shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel being combusted.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40CFR §60.46c(c))¹

d. During each performance evaluation and calibration check for the CEMS, the following methods shall be used:

- i. For SO₂, EPA Reference Method 6, 6A, 6B, or 6C shall be used;
- ii. For NO_x, EPA Reference Method 7, 7A, 7C, 7D or 7E shall be used; and
- iii. For O₂ or CO₂, EPA Reference Method 3, 3A, or 3B shall be used;.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.47a(i) and (j))¹

e. The 1-hour averages for SO₂, NO_x, and CO shall be expressed in pounds per hour (lb/hr), parts per million by volume dry (ppmvd) at 3 percent O₂, and pounds per million Btu (lb/MMBtu).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40CFR §60.46c)¹

f. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS. The CEMS shall be operated in accordance with 40 CFR Part 60, Appendix B.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40CFR §60.13, 40CFR §60.46c)¹

g. Quarterly accuracy audits and daily calibration drift tests shall be performed in accordance with 40 CFR Part 60, Appendix F. Successive quarterly audits shall occur no closer than two months. RATA must be conducted at least once every four calendar quarters.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40CFR §60.13, 40CFR §60.46c)¹

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.13)¹

i. Prior to the startup of the non-selective catalytic reduction system and thereafter, the permittee shall at its own expense install, operate, and maintain a continuous monitoring system to measure and record the ammonia injection rate in pounds per hour (lbs/hr).

(Auth.: HAR §11-60.1-3, §11-60.1-90)

6. Continuous Opacity Monitoring System (COMS)

- a. The permittee shall install, calibrate, operate, and maintain a continuous opacity monitoring system for the measurement and recording of the opacity of stack emissions.
- b. The systems shall meet the U.S. EPA monitoring performance standards of 40 CFR Part 60 Section 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications. The span value of the opacity COMS shall be between 60 and 80 percent.
- c. All 6-minute average opacity readings shall be recorded in percent.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40CFR §60.13, §60.47c)¹

7. Ammonia Slip

Records shall be maintained on the amount of ammonia slip from the operation of the non-selective catalytic reduction system. Estimates of ammonia slip shall be based on the ammonia emission rates measured during the initial and subsequent annual performance test required by Section G. of this Attachment. Back-up data, calculations, and the resulting ammonia emissions shall be maintained on a monthly basis.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section F. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 14, 16, 17 and 24, respectively:

- a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup. The notification shall include:
 - i. The design heat input capacity of the boiler and identify the fuels to be combusted in the boiler.
 - ii. A copy of the federally enforceable requirements that limit the annual capacity factor for all fuels.
 - iii. The anticipated annual capacity factor based on all the fuels fired and based on each individual fuel fired.
- b. Intent to shut down 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, or any petroleum storage tank, 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; 40CFR §60.48c)^{1, 2}

2. Deviations

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

During the permit term, the permittee shall submit at least annually to the Department of Health and USEPA 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:

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

The compliance certification shall be submitted **within ninety (90) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

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

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

4. Semi-Annual Reports

- a. The permittee shall submit summary reports as required by 40 CFR §60.48c and shall include the following:
 - i. Results of the annual source performance tests and RATAs.
 - ii. SO₂ emission limit and sulfur content limit
 - (1) Calendar dates covered in the reporting period;
 - (2) Each 30-day average SO₂ emission rate (lb/MMBtu) calculated during the reporting period, ending with the last 30-day period, reasons for any noncompliance with the emission standard, and a description of corrective actions taken;
 - (3) Identification of any boiler operating days for which SO₂ or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
 - (4) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the boiler.
 - (5) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
 - (6) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
 - (7) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

- (8) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).
- (9) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- (10) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification used to demonstrate compliance, records of fuel supplier certification as described under Special Condition E.1. of this attachment. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the permittee of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.48c)¹

- iii. The permittee shall submit all 6-minute periods during which the average opacity exceeds the opacity standards in Attachment IIB, Special Condition No. D.2. The information shall include the dates and percent opacity of those periods.

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

b. Excess Emissions

The permittee shall submit a written report of all excess emissions to the Department of Health and the U.S. EPA semi-annually and shall include the following:

- i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any concurrent data, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and corrective actions taken.
- ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the boiler(s). The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted, shall also be reported.
- iii. The date and time identifying each period during which CEMS was inoperable except for zero and span checks. The nature of each system repair or adjustment shall be described.
- iv. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the CEMS operated properly during the period and was not subject to any repairs or adjustments except for zero and span checks.

- v. For purposes of this Covered Source Permit, excess emissions shall be defined as follows:
- (1) Any three (3)-hour period during which the average emissions of NOX and SO₂, as measured by the continuous monitoring system, exceed the emission limits set forth in Attachment IIB, Special Condition No. D.1.
 - (2) Any opacity measurements, as measured by the transmissometer continuous monitoring system exceeding the opacity limits and corresponding averaging times set forth in Attachment IIB, Special Condition No. D.2.
- vi. The enclosed Excess Emission and Monitoring System Performance Summary Report shall be used in conjunction to the reporting of excess emissions of NOX, SO₂, and opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-32, §11-60.1-38, §11-60.1-90, §11-60.1-161; SIP§11-60-15, §11-60-24; 40 CFR 60.48c)^{1,2}

- c. Monitoring Reports
The permittee shall submit semi-annually, the attached *Monitoring Report Forms: Coal Consumption - Boiler, Fuel Oil No. 2 Consumption - Boiler, Spec Used Oil Consumption - Boiler, Operating Hours - Boiler, and Visible Emissions* to the Department of Health. These 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 be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

5. Annual Emissions

As required by *Attachment IV, Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III, Annual Fee Requirements*, the permittee shall report **annually** the total tons/year emitted of each regulated air pollutant, including any 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: Boilers* or equivalent form shall be used in reporting emissions.

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

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

Section G. Testing Requirements

1. **Within sixty (60) days** after achieving the maximum production rate of the boiler but not later than one-hundred eighty (180) days after the initial start-up as defined in 40 CFR Part 60.2., the permittee shall conduct or cause to be conducted performance tests on the boiler. The performance test shall be conducted for nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter (PM), volatile organic compounds (VOC), and ammonia (NH₃) while firing on coal and fuel oil no.2.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8, §60.44c, §60.45c)¹

2. On an annual basis or at other such times as may be specified by the Department of Health, the permittee shall conduct or cause to be conducted a source performance tests on the boiler for opacity, SO₂, NO_x, CO, VOC, PM, and NH₃. The source performance tests shall be conducted and the results reported in accordance with the test methods set forth in 40 CFR Part 60 Appendix A, and 40 CFR §60.8. The following test methods or U.S. EPA-approved equivalent methods, or alternate methods with prior written approval from the Department of Health, shall be used:
 - a. Performance tests for the emissions of SO₂ shall be conducted using the test methods and procedures of 40 CFR §60.44c.
 - b. Performance tests for the emissions of NO_x shall be conducted using 40 CFR Part 60, Methods 1-4 and 19.
 - c. Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60, Methods 1-4 and 10.
 - d. Performance tests for the emissions of VOC shall be conducted using 40 CFR Part 60, Methods 1-4 and 25.
 - e. Performance tests for the emissions of particulate matter shall be conducted using the test methods and procedures of 40 CFR §60.45c.
 - f. Performance test for the emissions of NH₃ shall be conducted using U.S. EPA Conditional Test Method 027(CTM-027).

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8, §60.44c, §60.45c)¹

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

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; SIP§11-60.-15; 40 CFR 60.8)^{1, 2}

4. The source performance tests shall be conducted at the maximum expected operating capacity of the boiler.

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

5. The permittee, at its own expense, shall be responsible for installing, providing, and maintaining the necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities as may be necessary for the determination of the air pollutant emissions. The Department of Health may monitor any of the required source performance tests.

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

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

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

7. **Within sixty (60) days** after completion of the source performance test, the permittee shall submit to the Department of Health and U.S. EPA Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR 60.48a, 60.49a; SIP§11-60-15)^{1, 2}

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

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

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

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

Section G. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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- 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 pre-construction 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 FOR THE LOADING RACK
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This attachment encompasses the following equipment and associated appurtenances:
 - a. Bottom-loading petroleum tank truck loading rack with of two (2) each 650 gpm loading arms.
 - b. John Zink Vapor Combustion Unit, model no. ZCT-1-4-20-X-1/4.

(Auth.: HAR §11-60.1-3)
2. The permittee shall install an identification tag or name plate on the vapor combustion unit which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational Limitations

1. The vapor combustion unit shall be connected, fully functional and operational at all times whenever the petroleum tank truck loading rack is in operation.

(Auth.: HAR §11-60.1-3, §11-60.1-90)
2. Under no circumstance shall the two loading arms be used simultaneously. Only one load arm may be used during tank truck loading operations.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)
3. The maximum throughput of the petroleum tank truck loading rack shall not exceed 12,600,000 gallons of ethanol in any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-3, §11-60.5, §11-60.1-90)
4. Loading at the petroleum tank truck rack shall be limited only to documented vapor-tight petroleum tank trucks equipped with compatible vapor collection systems.

(Auth.: HAR §11-60.1-3, §11-60.1-90)
5. The vapor combustion unit shall be operated and maintained in accordance with the manufacturer's specifications.

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

6. For any six (6) minute averaging period, the vapor combustion unit shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during startup, shutdown, or equipment breakdown, the vapor combustion unit may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

Section C. Monitoring and Recordkeeping

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 in a permanent form suitable for inspection and shall be made available to the Department of Health or their representative upon request.

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

1. The permittee shall install, maintain, and operate a non-resetting flow meter on each arm to monitor the throughput of the petroleum tank truck loading rack.

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

2. Each calendar month, the permittee shall monitor and inspect all potential sources of liquid and vapor leakage in the ethanol transfer system, vapor recovery system, vapor combustion unit and at each loading arm. The monitoring and inspections shall be completed during the loading of petroleum tank trucks. For the purposes of this paragraph, sight, sound and smell are acceptable means of detection. The sources of the leaks shall be repaired within fifteen (15) calendar days after it is detected. The monthly inspection record shall include, as a minimum, the following:

- a. Date of inspection;
- b. Findings - indicate no leaks discovered or the location, nature and severity of each leak;
- c. Leak determination method;
- d. Corrective action including date of repair, reason for any repair interval in excess of 15 days; and
- e. Inspector's name and signature.

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

3. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (calendar month) V.E. observations for the vapor combustion unit in accordance with USEPA Method 9 or by use of a Ringlemann Chart as provided. The monthly observation for the vapor combustion unit shall consist of two (2) consecutive six (6) minute observations taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emissions Form Requirements.
- b. The permittee shall conduct **annual** (calendar year) V.E. observations for the vapor combustion unit by a certified reader in accordance with USEPA Method 9. The annual observation for the vapor combustion unit shall consist of two (2) consecutive six (6) minute observations taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emissions Form Requirements.
- c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. observation. The waiver request shall be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

The waiving of the annual (Method 9) visible emissions monitoring requirement does not absolve the permittee from any monthly (Method 9 or Ringlemann chart) visible emissions monitoring requirements.

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

Section D. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 14, 16, 17, and 24, respectively:
 - a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup.
 - b. Intent to shut down 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; SIP §11-60-10; SIP §11-60-16)²

- 2. The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional testing, 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. The permittee shall submit semi-annually the following written reports to the Department of Health. The report shall be submitted **within sixty (60) days** after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31), and shall include the following:
 - a. Any deviation from the permit conditions shall be clearly identified. At a minimum, the report shall include the information identified in HAR §11-60.1-16(b).
 - b. The rolling twelve (12) month total of ethanol dispensed by the tank truck load rack. The attached *Annual Emissions/Monitoring Report Form - Tank Truck Load Rack* shall be used.
 - c. Incidences when visible emissions were observed from the vapor combustion unit during the reporting period for which a monthly observation was performed.
 - d. Any opacity exceedances as determined by visible emissions monitoring of the vapor combustion unit. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit, in writing, a statement that there were no exceedances for that semi-annual period. The enclosed *Monitoring Report Form: Visible Emissions*, shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

During the permit term, the permittee shall submit **at least annually** to the Department of Health and USEPA 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:

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

The compliance certification shall be submitted **within ninety (90) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

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

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

5. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons/yr 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/Monitoring Report Form: Tank Truck Load Rack* shall be used. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension.

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

Section E. Agency Notification.

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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 pre-construction 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 IID: SPECIAL CONDITIONS FOR THE DIESEL ENGINE GENERATOR
AND DIESEL ENGINE FIRE PUMP
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This attachment encompasses the following equipment and associated appurtenances:

- a. One (1) 1.45 MW Caterpillar Diesel Engine Generator set, model no. 3516B; and
- b. One (1) 145 bhp Clark Emergency Diesel Engine Fire Pump, model no. JU4H-UF54.

(Auth.: HAR§11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed above to show model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous position.

(Auth.: HAR§11-60.1-5)

Section B. Applicable Federal Regulations

The diesel engines are subject to the provisions of the following federal regulations:

1. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
2. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

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, §11-60.1-161; 40 CFR §60.1, §60.4200)¹

Section C. Operational Limitations

1. Fuel Type

- a. Up through September 30, 2007, the diesel engines shall be fired only on fuel no. 2 with a maximum sulfur content not to exceed 0.4 percent by weight.

- b. Beginning on October 1, 2007 and up through September 30, 2010, the diesel engines shall be fired only on fuel oil no. 2 with:
 - i. A maximum sulfur content not to exceed 0.05 percent by weight; and
 - ii. A cetane index or aromatic content as follows:
 - 1) A minimum cetane index of 40; or
 - 2) A maximum aromatic content of 35 volume percent.
- c. Beginning on October 1, 2010, the diesel engines shall be fired only on fuel oil no. 2 with:
 - i. A maximum sulfur content not to exceed 0.015 percent by weight; and
 - ii. A cetane index or aromatic content as follows:
 - 1) A minimum cetane index of 40; or
 - 2) A maximum aromatic content of 35 volume percent.
- d. The diesel engines may also be fired on an alternative fuel allowed under Special Condition No. C.3.b. of this attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90, §11-60.1-161;
SIP §11-60-24; 40 CFR §60.4207)^{1,2}

2. Fuel Consumption Limit

The total fuel consumption of the 1.45 MW Caterpillar diesel engine generator shall not exceed 27,026 gallons in any rolling 12-month period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-38, §11-60.1-90;
SIP §11-60-24)²

3. Alternate Operating Scenarios

Terms and conditions for reasonably anticipated operating scenarios identified by the permittee in the covered source permit application and approved by the Department of Health are as follows:

- a. The permittee may replace the diesel engine generator or diesel engine fire pump with a temporary replacement unit if any repair work reasonably warrants the removal (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) of the diesel engine generator or diesel engine fire pump from its site and the following provisions are adhered to:

- i. Written notification identifying the reasons for the replacement from the site of operation is submitted to and approved by the Department of Health prior to the exchange;
 - ii. The emissions of all pollutants from the replacement diesel engine are equal to or less than the emissions from the permitted diesel engine;
 - iii. The temporary replacement unit complies with all applicable conditions including all air pollution control equipment requirements, operating restrictions and emission limits;
 - iv. The diesel engine generator or diesel engine fire pump shall be repaired and returned to service at the same location in a timely manner; and
 - v. Prior to the removal and return of the diesel engine generator or diesel engine fire pump, the permittee shall submit to the Department of Health written documentation on the removal and return dates and on the make, size, model and serial numbers for both the temporary replacement unit and installed unit.
- b. Upon receiving written approval from the Department of Health, the permittee may burn an alternative fuel or fuel additive provided the permittee demonstrates compliance with all applicable State and Federal requirements and applicable conditions of this covered source permit. The burning of the alternative fuel or fuel additive shall not result in an increase in emissions of any air pollutant or in the emission of any air pollutant not previously emitted.
- c. The permittee shall contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility the scenario under which it is operating and submit written notification to the Department of Health; and
- d. The terms and conditions under each alternate operating scenario shall meet all applicable requirements including conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90; SIP §11-60-24)²

4. Opacity Limits

For any six (6) minute averaging period, the diesel engines shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during startup, shutdown, or equipment breakdown, the diesel engines may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90)

5. Diesel Engine Generator Stack Height

The height of the exhaust stack for the diesel engine generator shall be, at a minimum, thirty-five (35) feet above ground level.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

6. The permittee shall operate and maintain the diesel engine generator and diesel engine fire pump in accordance with the manufacturer's written instruction or procedures developed by the permittee that are approved by the manufacturer, over the life of the diesel engine generator and diesel engine fire pump. Additionally, the permittee may only change those settings that are permitted by the manufacturer.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.4206, §60.4211)¹

7. The permittee shall comply with the requirements of 40 CFR §60.4211(b) and (c) as it applies to the model year of the diesel engines.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.4211)¹

8. The permittee shall meet the emissions standards as specified in 40 CFR §60.4204 for the entire life of the diesel engine generator.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.4204, §60.4206)¹

9. The permittee shall ensure that the diesel engine fire pump meets the emissions standards listed in Table 4 of 40 CFR Part 60, Subpart IIII.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.4205)¹

10. The diesel engine fire pump may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of the diesel engine fire pump shall not exceed 100 hours in any rolling 12-month period.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.4211)¹

Section D. Monitoring and Recordkeeping Requirements

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 in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

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

1. Fuel Specifications

The sulfur content of the fuel to be fired in the diesel engines shall be tested in accordance with the most current American Society for Testing and Materials (ASTM) methods. The fuel sulfur content shall be verified by either of the following methods:

- a. A representative sample of each batch of fuel received shall be analyzed for its sulfur content; or
- b. A certificate of analysis on the sulfur content shall be obtained for the fuel delivered by the supplier.

Records of the sulfur content in the fuel shall be maintained on a monthly basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-38, §11-60.1-90)

2. Fuel Usage

The permittee shall at its own expense install, operate, and maintain a non-resetting volumetric fuel flow metering system on the diesel engine generator for the continuous measurement and recording of the fuel usage of the diesel engine generator.

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

3. Fuel purchase receipts, showing the fuel type, date of delivery, and amount (gallons) of fuel delivered for the diesel engine generator shall be maintained on an annual basis.

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

4. Inspection, Maintenance and Repair Log

An inspection, maintenance, and repair log shall be maintained for the diesel engine generator. Replacement of parts and repairs to the diesel engine generator shall be documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/repair;
- b. A description of the findings or any maintenance or repair work performed;
- c. The name and title of the inspector; and
- d. Part(s) inspected or repaired.

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

5. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (calendar month) V.E. observations for the diesel engines in accordance with USEPA Method 9 or by use of a Ringlemann Chart as provided. The monthly observation for the diesel engine shall consist of two (2) consecutive six (6) minute observations taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emissions Form Requirements.
- b. The permittee shall conduct **annual** (calendar year) V.E. observations for the diesel engines by a certified reader in accordance with USEPA Method 9. The annual observation for the diesel engine shall consist of two (2) consecutive six (6) minute observations taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emissions Form Requirements.
- c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. observation. The waiver request shall be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

The waiving of the annual (Method 9) visible emissions monitoring requirement does not absolve the permittee from any monthly (Method 9 or Ringlemann chart) visible emissions monitoring requirements.

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

6. The permittee shall install, operate, and maintain a non-resetting hour meter prior to the startup of the diesel engine fire pump.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR 60.4209)¹
7. The permittee shall follow the applicable recordkeeping requirements of 40 CFR §60.4214.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR 60.4212)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. 14, 17 and 24, respectively:
 - a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup.
 - 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; SIP §11-60-10; SIP §11-60-16)²
2. The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional testing, 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. The permittee shall submit semi-annually the following written reports to the Department of Health. The report shall be submitted **within sixty (60) days** after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31), and shall include the following:
 - a. Any deviation from the permit conditions shall be clearly identified. At a minimum, the report shall include the information identified in HAR §11-60.1-16(b).
 - b. The total fuel consumed by the diesel engine generator on a monthly and rolling 12-month rolling basis;

- c. The maximum sulfur content (percent by weight) of the fuel oil no. 2;
- d. The total operating hours of the diesel engine fire pump on a rolling 12-month basis; and
- e. Any opacity exceedances as determined by the required visible emissions monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for the diesel engines there were no exceedances for that semi-annual period.

The enclosed *Annual Emissions/Monitoring Report Form: Fuel Oil No. 2 Consumption - Diesel Engine Generator* and *Monitoring Report Form: Operating Hours - Diesel Engine Fire Pump*, and *Monitoring Report Form: Visible Emissions*, shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

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

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

The compliance certification shall be submitted **within ninety (90) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

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

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

5. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report annually the total tons/yr 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/Monitoring Report Form: Fuel Oil No. 2 Consumption - Diesel Engine Generator* shall be used.

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

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

6. The permittee shall follow the applicable notification and reporting requirements of 40 CFR §60.4214.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR 60.4212)¹

Section F. Testing Requirements

1. **On an annual basis** or at other such times as may be specified by the Department, the permittee shall conduct or cause to be conducted source performance tests on the diesel engine generator in accordance with 40 CFR §60.4212, except as follows.

The permittee is not required to conduct or cause to be conducted source performance tests on the diesel engine generator if the permittee submits to the Department of Health the manufacturer's documents/certificates which certify that the diesel engine will meet the emission standards specified in 40 CFR Part 60, Subpart IIII for the life of the engine.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; SIP§11-60.-15; 40 CFR 60.4212)^{1,2}

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

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; SIP§11-60.-15; 40 CFR 60.8)^{1, 2}
3. The permittee, at its own expense, shall be responsible for installing, providing and maintaining the necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities as may be necessary for the determination of the air pollutant emissions. The Department of Health may monitor any of the required source performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP§11-60-15)²
4. **At least thirty (30) calendar days** prior to performing a test, the permittee shall submit a written source performance test plan to the Department of Health that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A source performance test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP§11-60.-15)²
5. **Within sixty (60) days** after completion of the source performance test, the permittee shall submit to the Department of Health and U.S. EPA Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; SIP§11-60-15)²
6. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests.

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

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

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

Section G. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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 pre-construction 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 IIE: SPECIAL CONDITIONS FOR THE COOLING TOWER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This attachment encompasses one (1) Marley Sigma F Series cooling tower, model no. F1262, and its associated appurtenances.

(Auth.: HAR §11-60.1-3)
2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Chromium-containing water treatment chemicals shall not be used in to the cooling tower.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-180; 40 CFR 63.402)¹
2. The design circulating rate of the cooling tower shall not exceed 7,640 gallons per minute.

(Auth.: HAR §11-60.1-5, §11-60.1-90)
3. The cooling tower maximum drift loss shall not exceed 0.005% of the total circulating rate of the water.

(Auth.: HAR §11-60.1-5, §11-60.1-90)
4. The cooling tower circulating water shall not contain the following:
 - a. Total dissolved solids in excess of 5,000 mg/l; and
 - b. Chlorine in excess of 1 mg/l.
(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

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 in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

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

1. Manufacturer's data on the design total drift rate and maximum design circulating flow rate of the cooling tower shall be kept on file at the facility for the life of the equipment.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

2. Records shall be maintained on the type and quantities of water treatment chemicals used in the cooling tower on a monthly basis. All Material Safety Data Sheets (MSDSs) associated with each chemical shall be maintained on site and made available for Department of Health's inspection upon request.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. The cooling tower blow-down water shall be analyzed monthly for the following:
 - a. Total dissolved solids; and
 - b. Chlorine

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

4. An on-site log shall be kept of the cooling tower blow-down water analysis test results.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

5. Inspection, Maintenance, and Repair Log
An inspection, maintenance, and repair log shall be maintained for the cooling tower. Replacement of parts and repairs to the cooling tower shall be documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/repair;
- b. A description of the findings or any maintenance or repair work performed;
- c. The name and title of the inspector; and

d. Part(s) inspected or repaired.

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

6. The Department of Health at any time may require the permittee to conduct water sample analysis for chromium based water treatment chemicals.

(Auth.: HAR §11-60.1-5, §11-60.1-90, 40 CFR 63.404)

Section D. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 14, 17 and 24, respectively:

- a. Anticipated date of initial startup, actual date of construction commencement, and actual date of startup.
- 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; SIP §11-60-10; SIP §11-60-16)²

2. The permittee shall report (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional testing, 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. The permittee shall submit **semi-annually**, the attached *Annual Emissions / Monitoring Report Form: Cooling Tower* to the Department of Health. These 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 be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

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

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

The compliance certification shall be submitted **within ninety (90) days** after the end of each calendar year, and shall be signed and dated by a responsible official.

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

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

5. Annual Emissions

As required by *Attachment IV: Annual Emissions Reporting Requirements* and in conjunction with the requirements of *Attachment III: Annual Fee Requirements*, the permittee shall report **annually** the total tons/yr 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 completion and submittal of *Annual Emissions / Monitoring Report Form: Cooling Tower*, shall be used.

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Attachment IIE
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[Issuance Date]
[Expiration Date]

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

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

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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 FOR INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

In addition to the Standard Conditions of the Covered Source Permit, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

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 of Health 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 of Health 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 (5) years from the date of any required monitoring, recordkeeping, testing, or reporting. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their 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 of Health and U.S. EPA Region 9, the enclosed *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:

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; and
6. Any additional information as required by the Department of Health including information to determine compliance.

The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by a responsible official or authorized representative.

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

In lieu of addressing each emission unit as specified in the 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)

CSP No. 0620-01-C
Attachment II - INSIG
Page of 3 of 3
[Issuance Date]
[Expiration Date]

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

PROPOSED

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

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 sixty (60) 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 submitted on forms furnished by the Department of Health.
4. The annual fees and the emission data shall be mailed to:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P. O. Box 3378
Honolulu, HI 96801-3378**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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.

1. Complete the attached *Annual Emissions Report Forms* for **Boilers, Carbon Dioxide Scrubber, and Ethanol Scrubber**, and *Annual Emissions/Monitoring Report Forms* for **Cooling Tower, Fuel Oil No. 2 Consumption - Diesel Engine Generator, and Tank Truck Load Rack**.
2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department of Health within **sixty (60) days** after the end of each calendar year and shall be mailed to the following address:

**Clean Air Branch
Environmental Management Division
Hawaii Department of Health
P. O. Box 3378
Honolulu, HI 96801-3378**

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 of Health upon request.
4. Any information submitted to the Department of Health 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 manufacturing, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

**ANNUAL EMISSIONS REPORT FORM
CARBON DIOXIDE SCRUBBER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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.

For Period: _____

Date: _____

Company Name: Kauai Ethanol LLC

Equipment Location: _____

Equipment Description: Carbon Dioxide Scrubber, Praj Industries

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 Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

Vapor Feed Rate (lb/hr): _____

Ethanol Concentration (%): _____

Water Feed Rate (lb/hr): _____

Ethanol Recovery Efficiency (%): _____

Annual Operating Hours: _____

Emission Rate (lb/hr): _____

Describe how the information above was determined. If the results from a source performance test were used, list the date of the source performance test.

**ANNUAL EMISSIONS REPORT FORM
ETHANOL SCRUBBER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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.

For Period: _____

Date: _____

Company Name: Kauai Ethanol LLC

Equipment Location: _____

Equipment Description: Ethanol Scrubber, Praj Industries

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 Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

Vapor Feed Rate (lb/hr): _____

Ethanol Concentration (%): _____

Water Feed Rate (lb/hr): _____

Ethanol Recovery Efficiency (%): _____

Annual Operating Hours: _____

Emission Rate (lb/hr): _____

Describe how the information above was determined. If the results from a source performance test were used, list the date of the source performance test.

**ANNUAL EMISSIONS REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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.

For Period: _____ Date: _____

Company Name: Kauai Ethanol LLC

Equipment Location: _____

Equipment Description: 70 MMBtu/hr Steam Boiler

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 Department of Health as public record.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

Type of Fuel Fired	Fuel Usage (gal/yr) or (ton/yr)	% Sulfur Content by Weight	Operating Hours
Coal			
Fuel Oil No. 2			
Spec Used Oil			

Control Technology	Pollutant Controlled	Control Efficiency	Fuel Fired	Hours Operated
SNCR	NO _x			
Lime Injection	SO _x			
Baghouse	PM ₁₀			

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration Date]

The following Visible Emissions (V.E.) Form shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observations shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. Form shall be completed as follows:

1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in 5 percent increments (i.e., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. Stand at least three (3) stack heights, but not more than a quarter mile from the stack.
4. Two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment.
5. The six (6) minute average opacity reading shall be calculated for each observation.
6. If possible, the observations shall be performed as follows:
 - a. Read from where the line of sight is at right angles to the wind direction.
 - b. The line of sight shall not include more than one (1) plume at a time.
 - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
 - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
 - e. The equipment shall be operating at maximum permitted or expected operating capacity.
7. If the equipment was shutdown for that period, briefly explain the reason for shutdown in the comment column.

The permittee shall retain the completed V.E. Forms for recordkeeping. 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 of Health, or their representative upon request.

**VISIBLE EMISSIONS FORM
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0620-01-C**

(Make Copies for Future Use for Each Equipment)

Permit No.: 0620-01-C

Company Name: Kauai Ethanol LLC

Equipment: _____

Fuel: _____

Stack height above ground (ft): _____

Stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

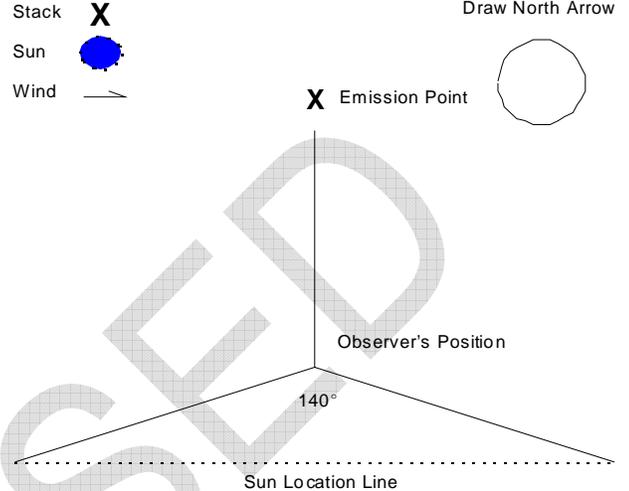
Wind speed (mph): _____

Temperature (°F): _____

Observer Name: _____

Observer Certified? Yes / No_

Observation Date and Start Time: _____



SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

Observation Date and Start Time: _____

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

**ANNUAL EMISSIONS/MONITORING REPORT FORM
TANK TRUCK LOAD RACK
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**:

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

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 the Department of Health as public record.

Responsible Official (Signature): _____

Tank Truck Load Rack Throughput

Month	Ethanol (gallons)	Rolling 12-Month Total (gallons)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Vapor Combustion Unit Make & Model: John Zink model no ZCT-1-4-20-X-1/4

No. of stations: 1 No. of arms per station: 2, maximum use: 1 arm at a time

**ANNUAL EMISSIONS/MONITORING REPORT FORM
 FUEL OIL NO. 2 CONSUMPTION - DIESEL ENGINE GENERATOR
 COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**.

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

Equipment Description: 1.45 MW Caterpillar Diesel Engine Generator

Serial/ID No.: _____

%Sulfur Content by Weight: _____

Method used to determine sulfur content: _____

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): _____

Month	Monthly Fuel Consumption (gallons)	Rolling 12-Month Total (gallons)	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
OPERATING HOURS - DIESEL ENGINE FIRE PUMP
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**.

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

Equipment Description: 145 bhp Clark Emergency Diesel Engine Fire Pump

Serial/ID No.: _____

%Sulfur Content by Weight: _____

Method used to determine sulfur content: _____

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): _____

Month	Operating Hours Rolling 12-Month Total (hours)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

**MONITORING REPORT FORM
OPERATING HOURS - BOILER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**.

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

Equipment Description: 70 MMBtu/hr Steam Boiler

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): _____

Month	OPERATING HOURS				
	Fuel Fired			Monthly Total	Rolling 12-Month Total
	Coal	Fuel Oil No. 2	Spec Used Oil		
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

**MONITORING REPORT FORM
COAL CONSUMPTION - BOILER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**:

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

Equipment Description: 70 MMBtu/hr Steam Boiler

Serial/ID No.: _____

%Sulfur Content by Weight: _____

Method used to determine sulfur content: _____

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): _____

Month	Monthly Fuel Consumption (tons)	Rolling 12-Month Total (tons)	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
FUEL OIL NO. 2 CONSUMPTION - BOILER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**:

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

Equipment Description: 70 MMBtu/hr Steam Boiler

Serial/ID No.: _____

%Sulfur Content by Weight: _____

Method used to determine sulfur content: _____

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): _____

Month	Monthly Fuel Consumption (gallons)	Rolling 12-Month Total (gallons)	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
 SPEC USED OIL CONSUMPTION - BOILER
 COVERED SOURCE PERMIT NO. 0620-01-C
 PAGE 1 OF 2**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**:

For Period: _____ Date: _____

Facility Name: Kauai Ethanol, LLC

Equipment Description: 70 MMBtu/hr Steam Boiler

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): _____

Month	Monthly Fuel Consumption (gallons)	Rolling 12-Month Total (gallons)	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
SPEC USED OIL CONSUMPTION - BOILER
COVERED SOURCE PERMIT NO. 0620-01-C
Page 2 of 2**

Number of used oil analyses received/performed for this report period: _____

Did any of the used oil analyses indicate exceedances of the permitted limits: YES NO

If Yes, indicate the number of exceedances: _____

Indicate the average of the Used Oil analyses results received/performed:

<u>Constituent/Property</u>	<u>Average Results</u>
Arsenic	_____ ppm by weight
Cadmium	_____ ppm by weight
Chromium	_____ ppm by weight
Lead	_____ ppm by weight
Total Halogens	_____ ppm by weight
Sulfur	_____ % by weight
Flash Point	_____ °F
Polychlorinated Biphenyls (PCB)	_____ ppm by weight

PROPOSED

**ANNUAL EMISSIONS/MONITORING REPORT FORM
COOLING TOWER
COVERED SOURCE PERMIT NO. 0620-01-C**

[Issuance Date]

[Expiration 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 on a **semi-annual basis**:

For Period: _____ Date: _____

Facility Name: Kauai Ethanol LLC

Equipment Description: Marley Sigma F Series Cooling Tower, model no. F1262

Equipment Capacity/Rating (specify units): water flow: 7,640 gpm; air flow: 923,200 cfm

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): _____

Cooling Tower:

1. Report the maximum total dissolved solids (mg/l) during this period. _____mg/l
2. Report the maximum chlorine (mg/l) during this period. _____mg/l
3. Chromium-containing water treatment chemicals were used during this period.
 YES NO

**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT
(PAGE 1 OF 2)**

Facility Name: Kauai Ethanol, LLC
Equipment Location: _____
Equipment Description: _____
Covered Source Permit No.: 0620-01-C
Condition No.: _____
Code of Federal Regulations (CFR): _____
Pollutant Monitored: _____
From: Date _____ Time _____
 To: Date _____ Time _____
Emission Limit: _____
Date of Last CEMS Certification/Audit _____
Total Source Operating Time _____

EMISSION DATA SUMMARY

1. Duration (Hours/Periods) of Excess Emissions in Reporting Period due to:
 - a. Start-Up/Shutdown _____
 - b. Cleaning/Soot Blowing _____
 - c. Control Equipment Failure _____
 - d. Process Problems _____
 - e. Other Known Causes _____
 - f. Unknown Causes _____
 - g. Fuel Problems _____

- Number of incidents of excess emissions _____

2. Total Duration of Excess Emissions _____

3. Total Duration of Excess Emissions
(% of Total Source Operating Time) _____

EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT
(CONTINUED, PAGE 2 OF 2)

CEMS PERFORMANCE SUMMARY

- 1. CEMS Downtime (Hours/Periods) in Reporting Period Due to:
 - a. Monitor Equipment Malfunctions _____
 - b. Non-Monitor Equipment Malfunctions _____
 - c. Quality Assurance Calibration _____
 - d. Other Known Causes _____
 - e. Unknown Causes _____

Number of incidents of monitor downtime. _____

2. Total CEMS Downtime _____

3. Total CEMS Downtime
(% of Total Source Operating Time) _____

CERTIFICATION by Responsible Official

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.

Name (Print/Type): _____

Title: _____

(Signature): _____

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0620-01-C
(PAGE 1 OF 2)**

[Issuance Date]

[Expiration 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 certification at least annually, or more frequently as set by an applicable requirement:

(Make Copies for Future Use)

For Period: _____

Date: _____

Company/Facility Name: Kauai Ethanol, LLC

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.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

Complete the following information for **each** term or condition of the permit 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. Current permit number: 0620-01-C
2. Emissions Unit No./Description: _____
3. Identify the permit term(s) or condition(s) that is/are the basis of this certification:

4. Compliance status during the reporting period:

- a. Has the emissions unit been in compliance with the identified permit term(s) or condition(s)?

YES NO

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0620-01-C
(CONTINUED, PAGE 2 OF 2)**

- b. If YES, was compliance continuous or intermittent?
 Continuous Intermittent c. If NO, explain.

5. The methods used for determining the compliance status of the emissions unit currently and over the reporting period (e.g., monitoring, recordkeeping, reporting, test methods, etc.):

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.):

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

- a. Is the emissions unit identified in this application in compliance with applicable enhanced monitoring and compliance certification requirements?

YES NO

- b. If YES, identify those requirements:

- c. If NO, describe below which requirements are not being met:
