

**PROPOSED**

Issue Date

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

14-xxxE CAB  
File No. 0317

Mr. Thomas E. Soles  
Plant Manager Hilo  
Mauna Loa Macadamia Nut Corporation,  
a subsidiary of The Hershey Company  
16-701 Macadamia Road  
Keaau, Hawaii 96749-8020

Dear Mr. Soles:

**Subject: Covered Source Permit (CSP) No. 0317-02-C  
Application for Significant Modification No. 0317-07  
Mauna Loa Macadamia Nut Corporation  
Biomass and Used Oil Fired Main Boiler, Oil Fired Back-up Boiler,  
and Two (2) Diesel Engine Generators  
Located At: 16-701 Macadamia Road, Keaau, Hawaii  
UTM: Zone 5, 289,428 m E, 2,174,789 m N (NAD 83)  
Date of Expiration: June 27, 2017**

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 information that you submitted as part of your application received on December 17, 2013. A receipt for the application filing fee of \$1,000.00 is enclosed. This permit supersedes CSP No. 0317-02-C, issued on June 28, 2012, in its entirety.

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 – Boilers  
Attachment IIB: Special Conditions – Diesel Engine Generators  
Attachment II - INSIG: Special Conditions - Insignificant Activities  
Attachment III: Annual Fee Requirements  
Attachment IV: Annual Emissions Reporting Requirements

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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: Diesel Engine Generators
- Monitoring Report Form: Boilers
- Monitoring Report Form: Diesel Engine Generators
- Monitoring Report Form: Opacity Exceedances
- Monitoring Report Form: Boiler Tune-ups
- Biennial/5-year Compliance Certification Report Form: Boiler

The following are enclosed for your use in monitoring visible emissions:

- Visible Emissions Form Requirements, State of Hawaii
- Visible Emissions Form

The following plan is enclosed for compliance assurance monitoring:

- Compliance Assurance Monitoring Plan: Particulate

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

If you have any questions, please contact Mr. Mark Saewong of the Clean Air Branch at (808) 586-4200.

Sincerely,

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

MS:rkb

Enclosures

c: Ed Yamamoto, EHS – Hilo  
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS  
COVERED SOURCE PERMIT NO. 0317-02-C****Issuance Date:****Expiration Date: June 27, 2017**

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)<sup>2</sup>
3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department, except as provided in HAR, Section 11-60.1-91.  
  
(Auth.: HAR §11-60.1-7; SIP §11-60-9)<sup>2</sup>
4. A request for transfer from person to person shall be made on forms furnished by the Department.  
  
(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department and the U.S. Environmental Protection Agency (EPA), Region 9.  
  
(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department, and the permit is amended to allow such deviation.  
  
(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)
7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and

(b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:
- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
  - b. The expected length of time that the air pollution control equipment will be out of service;
  - c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
  - d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
  - e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)<sup>2</sup>

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

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

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

(Auth.: HAR §11-60.1-16; SIP §11-60-16)<sup>2</sup>

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

23. The permittee shall allow the Director 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 a covered source covered by this permit**, the discontinuance shall be reported in writing to the Department by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)<sup>2</sup>

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

(Auth.: HAR §11-60.1-101; 40 CFR §70.5(a)(1)(iii))<sup>1</sup>

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

(Auth.: HAR §11-60.1-93)

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

(Auth.: HAR §11-60.1-90)

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

**Clean Air Branch  
Environmental Management Division  
Hawaii Department of Health  
919 Ala Moana Boulevard, Room 203  
Honolulu, HI 96814**

**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)

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

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

**ATTACHMENT IIA: SPECIAL CONDITIONS – BOILERS  
COVERED SOURCE PERMIT NO. 0317-02-C****Issuance Date:****Expiration Date: June 27, 2017**

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. Attachment IIA of this permit encompasses the following boilers and associated equipment:
  - a. Kipper & Sons Engineers, Inc., biomass/oil fired boiler (main boiler), serial no. 1174 (25,000 lb/hr steam capacity/35.7 MMBtu/hr with 15 MMBtu/hr Peabody oil burner);
  - b. PPC Industries electrostatic precipitator (ESP), job no. 1249, model no. S10-820-1S, servicing the main boiler; and
  - c. Superior Boiler Works 350 hp boiler (back-up boiler), model no. 7-X-1750-S250-PFCF-A2, serial no. 14090213, with 14.7 MMBtu/hr Power Flame, Inc., burner, model no. CM10-O, serial no. 101351784.
  
2. An identification tag or nameplate shall be displayed on the boilers and ESP listed above to show the applicable model no., serial no., and manufacturer. The identification tag or nameplate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-3)

(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section B. Applicable Federal Regulations**

1. The Kipper & Sons Engineers, Inc., main boiler is subject to the provisions of the following federal regulations:
  - a. 40 Code of Federal Regulations (CFR) Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories, Subpart A, General Provisions;
  - b. 40 CFR Part 63, NESHAP for Source Categories, Subpart JJJJJJ, NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources; and
  - c. 40 CFR Part 64, Compliance Assurance Monitoring.
  
- (Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174; 40 CFR §63.1, §63.11193, §64.2)<sup>1</sup>
  
2. The Superior Boiler Works back-up boiler is subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions;
  - b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units;

- c. 40 CFR Part 63, NESHAP for Source Categories, Subpart A, General Provisions; and
- d. 40 CFR Part 63, NESHAP for Source Categories, Subpart JJJJJ, NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174; 40 CFR §60.1, §60.40c, §63.1, §63.11193)<sup>1</sup>

- 3. The permittee shall comply with all applicable provisions 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, §11-60.1-174; 40 CFR Part 60, Part 63, Part 64)<sup>1</sup>

### **Section C. Operational and Emissions Limitations**

#### 1. Main and Back-up Boilers

- a. The main boiler shall only be fired on one (1) or a combination of the following fuels:
  - i. Biomass consisting of macadamia nut shells and macadamia nut husks; or
  - ii. Used oil satisfying the requirements of Attachment IIA, Special Condition No. C.2.
- b. Used oil fired by the main boiler shall not exceed 350,000 gallons in any rolling twelve-month (12-month) period.
- c. The back-up boiler shall be fired only on ultra-low sulfur diesel with a maximum sulfur content not to exceed 0.0015% by weight.
- d. Not more than one (1) boiler shall operate at any one time. In no event shall the main and back-up boiler operate simultaneously.
- e. Dirt and debris shall be removed from macadamia nut husks prior to firing the main boiler on the biomass.
- f. The main boiler shall not exceed emissions of 0.4 pounds of particulate matter (PM) per 100 pounds of biomass burned while the boiler is fired on biomass or biomass in combination with used oil.
- g. For any six (6) minute averaging period, the boilers shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, the boilers may exhibit visible emissions not greater than sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.
- h. The stack height for the main boiler shall be at least sixty-two (62) feet above base elevation.
- i. The stack height for the back-up boiler shall be at least forty (40) feet above base elevation.

- j. The permittee shall conduct a tune-up of the main boiler every five (5) years in accordance with 40 CFR §63.11223. Each five-year (5-year) tune-up must be conducted no more than sixty-one (61) months after the previous tune-up. The initial tune-up must be conducted no later than March 21, 2014. Procedures for conducting boiler tune-ups are specified in Attachment IIA, Special Condition No. D.3.
- k. The permittee shall conduct a tune-up of the back-up boiler biennially in accordance with 40 CFR §63.11223. Each biennial tune-up must be conducted no more than twenty-five (25) months after the previous tune-up. The first biennial tune-up must be no later than twenty-five (25) months after the initial startup of the back-up boiler. Procedures for conducting boiler tune-ups are specified in Attachment IIA, Special Condition No. D.3.
- l. The permittee shall have a one-time energy assessment performed by a qualified energy assessor for the main boiler no later than March 21, 2014. The energy assessment shall be performed according to the requirements specified in Attachment IIA, Special Condition No. D.4.
- m. Each boiler and associated air pollution control equipment and monitoring equipment shall be properly maintained and kept in good operating condition at all times. The permittee shall schedule and perform maintenance as specified by the manufacturer, 40 CFR Part 63, Subpart JJJJJJ, and as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-36, §11-60.1-38, §11-60.1-90; 40 CFR §60.42c, §63.11196, §63.11201, §63.11223; SIP §11-60-24)<sup>1,2</sup>

## 2. Firing Used Oil

For firing the main boiler on used oil, the following shall apply:

- a. The permit conditions prescribed herein may at any time be revised by the Department to reflect federal and state promulgated rules on used oil.
- b. This permit shall not release the permittee from compliance with all applicable state and federal regulations on the handling, transporting, storing, and burning of used oil.
- c. This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if it's declared or determined to be hazardous waste.
- d. Used oil for boiler fuel shall be Chlor-D-Tect tested prior to its acceptance.
- e. Used oil shall be sampled and analyzed before transferring the fuel from the receiving tank into the main boiler's dedicated used oil storage tank. The used oil shall not be transferred from the receiving tank to the boiler's dedicated tank unless laboratory analysis indicates the used oil complies with requirements specified in Attachment IIA, Special Condition No. C.2.f. Used oil samples shall be taken in such a manner that sampling is representative of the used oil collected.

- f. The used oil fired by the main boiler shall meet the following limits:

Constituent/Property	Allowable Limit
Sulfur	≤ 2% by weight
Arsenic	≤ 5 ppm
Cadmium	≤ 2 ppm
Chromium	≤ 10 ppm
Lead	≤ 100 ppm
Total Halogens	≤ 1,000 ppm
Flash Point	≥ 100 °F
PCBs	< 2 ppm

- g. Used oil may be obtained from the following sources within the facility:

- i. Plant production gearbox oil; and
- ii. Diesel engine generator crank case lubricants.

- h. Used oil may be obtained from the following external sources:

- i. Argo Resources;
- ii. C&F Trucking;
- iii. Conen's Freight Transport;
- iv. Hawaii Electric Light Company (HELCO);
- v. Hawaii Petroleum Distributors;
- vi. Island Princess;
- vii. Jeff's Auto Body Shop;
- viii. Kau Agribusiness;
- ix. Philip Services Hawaii, Ltd.;
- x. Unitek;
- xi. Wayne's Diesel; and
- xii. Willocks Construction Company.

- i. Used oil may be obtained from other sources pursuant to Attachment IIA, Special Condition No. E.7.

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

### 3. Additional Requirements

The Department reserves the right to impose the following additional requirements if performance testing indicates insufficient measures are being taken to control emissions:

- a. Implement operational limitations;
- b. Operate additional air pollution control equipment;
- c. Raise stack height; and
- d. Perform an ambient air quality impact assessment.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section D. Monitoring and Recordkeeping Requirements**

1. Records

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

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

2. The following records shall be maintained in accordance with 40 CFR §63.11225(c) and (d):

- a. A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart JJJJJJ, and all documentation supporting any Initial Notification of Applicability or Notification of Compliance Status submitted;
- b. Records identifying each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- c. A copy of the energy assessment report for the main boiler;
- d. Records of the occurrence and duration of each malfunction of the boilers;
- e. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation; and
- f. Records must be in a form suitable and readily available for expeditious review. Each record must be kept for five (5) years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least two (2) years after the date of each recorded action. Records may be kept off site for the remaining three (3) years.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §63.11225)<sup>1</sup>

3. Boiler Tune-ups

The tune-up must be conducted while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the twelve (12) months prior to the tune-up. The tune-up shall be conducted in accordance with 40 CFR §63.11223 as follows:

- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed thirty-six (36) months from the previous inspection for the back-up boiler, and not to exceed seventy-two (72) months from the previous inspection for the main boiler.

- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown, not to exceed thirty-six (36) months from the previous inspection for the back-up boiler, and not to exceed seventy-two (72) months from the previous inspection for the main boiler.
- d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available.
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- f. Maintain on-site a report containing the information:
  - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
  - ii. A description of any corrective actions taken as a part of the tune-up of the boiler; and
  - iii. The type and amount of fuel used over the twelve (12) months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within thirty (30) days of startup.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §63.11223)<sup>1</sup>

#### 4. Energy Assessment

The energy assessment shall be performed by a qualified energy assessor and must include the following in accordance with 40 CFR §63.11201:

- a. A visual inspection of the boiler system;
- b. An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints;
- c. An inventory of major energy use systems consuming energy from affected boiler;
- d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
- e. A list of major energy conservation measures that are within the facility's control;
- f. A list of the energy savings potential of the energy conservation measures identified; and

- g. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §63.11201)<sup>1</sup>

5. Voltmeter for ESP Secondary Voltage

- a. The permittee shall maintain and operate a voltmeter according to manufacturer's specifications to measure the secondary voltage of the ESP.
- b. To warn the operator of an excursion pursuant to Attachment IIA, Special Condition No. D.6.a, an audible alarm and light shall activate when the secondary voltage drops below 30 kV.
- c. The permittee shall record in a log the secondary voltage of the ESP every hour the ESP is operating.

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

6. Compliance Assurance Monitoring (CAM)

The main boiler is subject to the following CAM requirements to ensure compliance with the PM emissions limit specified in Attachment IIA, Special Condition No. C.1.f:

- a. The permittee shall follow the enclosed CAM plan for PM emissions and record excursions. Excursions are incidences when the secondary voltage exceeds 30 kV.
- b. The Department reserves the right to require additional monitoring in accordance with Attachment IIA, Special Condition No. D.6.f, if a failure to achieve compliance with the PM emissions limit is identified.
- c. Except for monitoring malfunctions, associated repairs, required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the main boiler is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance control activities shall not be used for purposes of reporting excursions, including data averages and calculations, or for fulfilling minimum data availability requirement. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- d. Upon detecting an excursion, the permittee shall restore operation of the main boiler (including control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any start-up, shut-down, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of the excursion (other than those caused by excused start-up or shut-down conditions). Such actions may include initial inspection and evaluation, recording that operations

returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the applicable indicator range that would not cause an excursion as specified in Attachment IIA, Special Condition No. D.5.a.

- e. Determination of whether the permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to performance testing, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- f. If the permittee identifies a failure to achieve compliance with the PM emissions limit for which monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Department, and if necessary, submit a permit modification to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- g. The Department may require the permittee to develop a quality improvement plan (QIP) in accordance with 40 CFR §64.8.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §64.4, §64.7, §64.8)<sup>1</sup>

#### 7. Main and Back-up Boiler Operation

The permittee shall maintain daily records identifying the specific boiler in operation (by the applicable serial number and model number).

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

#### 8. Biomass Fuel Consumption

The permittee shall operate and maintain an hour meter for the main boiler's biomass feed conveyor to determine the total tons of biomass consumed on a monthly and annual basis for purposes of annual emissions reporting, tune-up requirements, and source performance test requirements.

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

#### 9. Used Oil Verification

- a. A representative sample of used oil shall be taken prior to transferring the fuel into the dedicated used oil storage tank. Each sample shall be submitted in a timely manner to a qualified laboratory to determine compliance with the limits specified in Attachment IIA, Special Condition No. C.2.f. The laboratory analysis of the collected used oil shall be obtained prior to blending it with any fuel oil.

- b. The following records shall be maintained on the used oil received:
- i. The used oil supplier, date of delivery, types of used oil, and amount for each delivery of used oil received;
  - ii. The sample date, amount of used oil the sampling represents, date of the used oil analysis, and reports of each used oil analysis; and
  - iii. Date the used oil accepted for use was transferred into the 8,000 gallon dedicated used oil storage tank.

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

#### 10. Used Oil Consumption

A non-resetting volumetric fuel flow meter shall be installed, operated, and maintained for the main boiler for the permanent recording of the total gallons of used oil consumed. The non-resetting meter shall not allow the manual resetting or other manual adjustments of the meter readings. The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading. The following information shall be recorded for firing the main boiler on used oil:

- a. Date of meter readings;
- b. Beginning and ending meter readings for each month;
- c. Total gallons of fuel consumed for each month; and
- d. Total gallons of fuel consumed on a rolling twelve-month (12-month) basis.

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

#### 11. Back-up Boiler Fuel Consumption

A non-resetting volumetric fuel flow meter shall be installed, operated, and maintained for the back-up boiler for the permanent recording of the total gallons of fuel consumed. The non-resetting meter shall not allow the manual resetting or other manual adjustments of the meter readings. The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading. The following information shall be recorded:

- a. Date of meter readings;
- b. Beginning and ending meter readings for each month;
- c. Total gallons of fuel consumed for each month; and
- d. Total gallons of fuel consumed on an annual basis.

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

12. Back-up Boiler Fuel Records

Fuel purchase receipts, showing the fuel type, sulfur content (percent by weight), date of delivery, and amount (gallons) of fuel delivered for the back-up boiler shall be maintained. Fuel sulfur content may be demonstrated by providing a fuel supplier certification for the type of fuel purchased and received. The fuel supplier certification shall include the following information:

- a. The name of the fuel supplier;
- b. A statement from the fuel supplier that the fuel complies with the specification under the definition of distillate oil in 40 CFR §60.41c; and
- c. The sulfur content or maximum sulfur content of the fuel.

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

13. Visible Emissions

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

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

14. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for each boiler and the ESP servicing the main boiler, including verifications of the secondary voltage for the ESP. At a minimum, the following records shall be maintained:

- a. The date of the inspection/maintenance/repair work;
- b. A description of the part(s) inspected or repaired;
- c. A description of the findings and any maintenance or repair work performed;
- d. The secondary voltage reading for the ESP for each inspection; and
- e. The name and title of the personnel performing inspection/work.

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

**Section E. Notification and Reporting Requirements**

1. Standard Conditions Reporting

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 start-up, actual date of construction commencement, and actual date of start-up of the back-up boiler;
- 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, §11-60-16)<sup>2</sup>

## 2. Annual Emissions

- a. As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following** the end of each calendar year. Completion and submittal of the **Annual Emissions Report Form: Boilers** shall be used for reporting.
- b. Upon the written request of the permittee, the deadline for reporting annual emissions may be extended, if the Department determines that reasonable justification exists for the extension.

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

## 3. Monitoring Reports

- a. The permittee shall submit **semi-annually** written reports to the Department for the boilers. The reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31). The enclosed **Monitoring Report Form: Boilers** and **Monitoring Report Form: Opacity Exceedances**, shall be used for reporting.
- b. The permittee shall submit within **sixty (60) days** after each biennial tune-up of the back-up boiler and each 5-year tune-up of the main boiler, the enclosed **Monitoring Report Form: Boiler Tune-ups**, to the Department.

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

## 4. Biennial/5-year Compliance Certification Report

The permittee shall prepare, by March 1 of the year following the calendar year during which a tune-up is completed, the enclosed **Biennial/5-Year Compliance Certification Report Form: Boiler**. The report shall be submitted to the Department and the U.S. EPA, Region 9, by March 15 of each biennial reporting year for the back-up boiler and each five-year (5-year) reporting year for the main boiler.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90; 40 CFR §63.11225)<sup>1</sup>

5. Notifications

The permittee shall submit the Notification of Compliance Status for the main boiler no later than July 19, 2014. The notification must include the following certifications of compliance that is signed by the responsible official: "This facility complies with the requirements of 40 CFR §63.11214 to conduct an initial tune-up of the boiler," and "This facility has had an energy assessment performed according to 40 CFR §63.11214(c)."

The permittee shall submit notification to the U.S. EPA, Region 9, electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the U.S. EPA, Region 9, at:

**Director  
Air Division  
U.S. Environmental Protection Agency  
Region 9  
75 Hawthorne Street  
San Francisco, CA 94105**

6. Deviations

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

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

7. Used Oil

The permittee shall submit a written request and receive prior written approval from the Department before accepting used oil from another source. For each written request, the permittee shall identify the new source and provide a laboratory report of the used oil that compares results from the used oil analysis to the limits specified in Attachment IIA, Special Condition No. C.2.f. For each used oil analysis, the laboratory report shall indicate the amount of used oil that sampling represents.

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

8. Performance Testing

- a. **At least thirty (30) days prior** to conducting a source performance test pursuant to Attachment IIA, Section F, the permittee shall submit to the Department a test plan indicating the date(s) of the scheduled performance test as specified in Attachment IIA, Special Condition No. F.3.

- b. **Within sixty (60) days after** completion of a source performance test, the permittee shall submit the test results as specified in Attachment IIA, Special Condition No. F.4.

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

9. Compliance Certification

- a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:
- i. The identification of each term or condition of the permit that is the basis of the certification;
  - ii. The compliance status;
  - iii. Whether compliance was continuous or intermittent;
  - iv. The methods used for determining the compliance status of the source currently and over the reporting period;
  - v. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
  - vi. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
  - vii. Any additional information as required by the Department, including information to determine compliance.
- b. The compliance certification shall be submitted within **sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.
- c. Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

**Section F. Testing Requirements**

1. Annual Performance Testing

- a. **On an annual basis** or at other times as determined by the Department, the permittee shall conduct or cause to be conducted performance testing on the main boiler to determine compliance with the particulate emissions limit specified in Attachment IIA, Special Condition No. C.1.f.

- b. Testing for particulate shall be conducted at 90% to 100% of the main boiler's rated capacity or at highest achievable load if 90% to 100% of the maximum rated capacity cannot be physically achieved.
- c. Testing for particulate shall be conducted for the main boiler fired on biomass.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, SIP §11-60-15; 40 CFR §60.8)<sup>1,2</sup>

## 2. Test Methods

- a. Performance testing for particulate emissions shall be conducted in accordance with 40 CFR Part 60, Appendix A, and 40 CFR §60.8. The following test methods or U.S. EPA approved equivalent methods shall be used:
  - i. Method 1 for sample and velocity traverse;
  - ii. Method 2 for velocity and volumetric flow rate;
  - iii. Method 3 for gas analysis;
  - iv. Method 4 for moisture content of stack gases; and
  - v. Method 5 for concentration of particulate and moisture content.
- b. Performance tests shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with the permit requirements, the arithmetic mean of the results from the three (3) runs from the filterable portion shall apply. For each test run, the following operation parameters shall be recorded and reported:
  - i. The biomass feed rate measured in tons per hour for the boiler;
  - ii. Boiler steam rate (lb/hr); and
  - iii. Secondary voltage reading for the ESP servicing the boiler.
- c. Note that Method 1 cannot be used under the following conditions:
  - i. Cyclonic or swirling gas flow at the sampling location;
  - ii. Stack duct with a diameter less than twelve (12) inches or a cross-sectional area less than 113 square inches; and
  - iii. Sampling location less than two (2) stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.
- d. For Method 5, the sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be at least thirty (30) dry cubic feet at standard conditions (dscf).
- e. Particulate emissions for Method 5 shall be reported in two (2) categories:
  - i. Front half (filter and probe); and
  - ii. Front and back half (probe, filter, and impingers). When conducting back half clean-up, all connectors and tubing of the back half sampling train up to and including the first impinger shall be properly rinsed. All rinses shall be included in the analysis for back half.

- f. For each run, the particulate emission rate shall be determined by the equation pounds/hour =  $Q_s \times c_s$ , where  $Q_s$  = volumetric flow rate of the total effluent in dscf/hour as determined in accordance with Method 2, and  $c_s$  = concentration of particulate in pounds/dscf as determined in accordance with Method 5.
- g. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless the deviations are approved by the Department before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; SIP §11-60-15; 40 CFR §60.8)<sup>1,2</sup>

### 3. Performance Test Plan

**At least thirty (30) days prior** to conducting the performance test, the permittee shall submit a written performance test plan to the Department and U.S. EPA, Region 9, that includes test date(s), test duration, test methods, source operation, and any other parameters that may affect the test results. A test plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §60.8; SIP §11-60-15)<sup>1,2</sup>

### 4. Performance Test Report

**Within sixty (60) days** after completion of the performance test, the permittee shall submit to the Department and U.S. EPA, Region 9, the test report which includes the operating conditions of the boiler at the time of the test (e.g., steam rate in pounds per hour, macadamia nut shell feed rate in tons per hour, secondary voltage for ESP, etc.), the summarized test results, other pertinent support calculations, and field/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 §60.8; SIP §11-60-15)<sup>1,2</sup>

### 5. Performance Test Waiver

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

6. Testing Expense and Monitoring

The permittee shall provide sample and testing facilities at its own expense and the Department may monitor the performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-15, §11-60.1-90)

**Section G. 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)

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

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

**ATTACHMENT IIB: SPECIAL CONDITIONS – DIESEL ENGINE GENERATORS  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:**

**Expiration Date: June 27, 2017**

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. Attachment IIB of this permit encompasses the following equipment:
  - a. 460 kW/685 hp Detroit diesel engine generator, model no. 450-XC6DT3, serial no. 06r1051227; and
  - b. 460 kW/685 hp Detroit diesel engine generator, model no. 450-XC6DT3, serial no. 06r1051231.
  
2. The permittee shall install an identification tag or nameplate on the diesel engine generators listed above which identifies the model no., serial no., and manufacturer. The identification tag or nameplate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-3)

(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section B. Applicable Federal Regulations**

1. The diesel engine generators are subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions;
  - b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines;
  - c. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP), Subpart A, General Provisions; and
  - d. 40 CFR Part 63, NESHAP for Source Categories, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174; 40 CFR §60.1, §60.4200, §63.1, §63.6585)<sup>1</sup>

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-174; 40 CFR Part 60, Part 63)<sup>1</sup>

**Section C. Operational and Emissions Limitations**

1. Diesel Engine Generators

- a. Each diesel engine generator shall be fired only on ultra-low sulfur diesel fuel with the following specifications:
  - i. Maximum sulfur content of 0.0015% by weight; and
  - ii. Minimum cetane index of 40 or maximum aromatic content of 35%.
- b. For any six (6) minute averaging period, each diesel engine generator shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, each diesel engine generator may exhibit visible emissions not greater than sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.
- c. The stack servicing the diesel engine generators shall be at least forty-four (44) feet above base elevation.
- d. The diesel engine generators shall be maintained in good operating condition at all times with scheduled inspections and maintenance as recommended by the manufacturer and as needed.

(Auth.: HAR §11-60.1-3, §11.60.1-5, §11-60.1-32, §11.60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR §60.4207; SIP §11-60-24)<sup>1,2</sup>

2. Alternate Operating Scenario

- a. The permittee may temporarily replace each diesel engine generator with a temporary replacement unit if repair reasonably warrants the removal of the diesel engine generator from its site (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) and the following provisions are adhered to:
  - i. The installation and operation of the temporary replacement unit shall not exceed twelve (12) consecutive months;
  - ii. A request for the replacement unit shall be submitted in accordance with Attachment IIB, Special Condition No. E.6.a;
  - iii. The temporary replacement unit must be similar in size to the diesel engine generator being replaced with equal or lesser emissions;
  - iv. The temporary replacement unit shall comply with all applicable conditions required for the primary unit, including all air pollution control equipment requirements, operating restrictions, and emission limits;
  - v. The diesel engine generator shall be repaired and returned to service at the same location in a timely manner; and
  - vi. Removal and return information shall be submitted in accordance with Attachment IIB, Special Condition No. E.6.b.

- b. The Department may require an ambient air quality assessment of the temporary unit, and/or provide a conditional approval to impose additional monitoring, testing, recordkeeping, and reporting requirements to ensure the temporary unit is in compliance with the applicable requirements of the permitted unit being temporarily replaced.
- c. Records shall be maintained in accordance with Attachment IIB, Special Condition No. D.5.
- d. The terms and conditions under each operating scenario shall meet all applicable requirements, including the special conditions of this permit.

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

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

##### 1. Records

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

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

##### 2. Fuel Consumption

Fuel purchase receipts, showing the fuel type, sulfur content (percent by weight), cetane index or aromatic content (volume percent), date of delivery, and amount (gallons) of fuel delivered for each diesel engine generator shall be maintained. Fuel sulfur content, cetane index, and aromatic content may be demonstrated by providing the supplier's fuel specification sheet for the type of fuel purchased and received. Records on the total amount (gallons) of fuel fired by the diesel engine generators shall be maintained for purposes of annual emissions reporting.

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

##### 3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work performed on the diesel engine generators. At a minimum, a log shall be maintained to include the date of the inspection/work, name and title of the personnel performing inspection/work, a description of the findings and any work performed on the equipment, and a description of the part(s) inspected or repaired.

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

4. Visible Emissions

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

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

5. Alternate Operating Scenario

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.

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

**Section E. Notification and Reporting Requirements**

1. Standard Condition Reporting

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

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

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)<sup>2</sup>

2. Deviations

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

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

3. Annual Emissions

- a. As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days** following the end of each calendar year. The enclosed **Annual Emissions Report Form: Diesel Engine Generators** shall be used for reporting.
- b. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department determines that reasonable justification exists for the extension.

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

4. Monitoring Reports

The permittee shall submit **semi-annually** written monitoring reports to the Department and U.S. EPA, Region 9. The reports shall be submitted **within sixty (60) days** after the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31). The enclosed **Monitoring Report Form: Diesel Engine Generators** and **Monitoring Report Form Opacity Exceedances**, shall be used for reporting.

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

5. Compliance Certification

- a. During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:
  - i. The identification of each term or condition of the permit that is the basis of the certification;
  - ii. The compliance status;
  - iii. Whether compliance was continuous or intermittent;
  - iv. The methods used for determining the compliance status of the source currently and over the reporting period;
  - v. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
  - vi. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
  - vii. Any additional information as required by the Department, including information to determine compliance.

- b. The compliance certification shall be submitted within **sixty (60) days** after the end of each calendar year, and shall be signed and dated by a responsible official.
- c. Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

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

6. Alternate Operating Scenario

- a. The permittee shall submit a written request and receive prior written approval from the Department before exchanging a permitted diesel engine generator with a temporary replacement unit. The written request shall identify, at a minimum, the reasons for the replacement of the diesel engine generator from the site of operation and the estimated time period/dates for the temporary replacement, type, size, and manufacturing date of the temporary unit, emissions data, and stack parameters.
- b. Prior to the removal and return of the permitted diesel engine generator, the permittee shall submit to the Department written documentation on the removal and return dates and on the make, size, model and serial numbers for both the temporary replacement unit and the installed unit.

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

**Section F. Agency Notification**

Any document (including reports) required to be submitted by this 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)

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

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

**ATTACHMENT II – INSIG  
SPECIAL CONDITIONS – INSIGNIFICANT ACTIVITIES  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:**

**Expiration Date: June 27, 2017**

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility:

**Section A. Equipment Description**

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

(Auth.: HAR §11-60.1-3)

**Section B. Operational Limitations**

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

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

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

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

**Section C. Monitoring and Recordkeeping Requirements**

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

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

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

**Section D. Notification and Reporting**

Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source currently and over the reporting period;
5. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
6. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
7. Any additional information as required by the Department including information to determine compliance.

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

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

In lieu of addressing each emission unit as specified in 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)

**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)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:**

**Expiration Date: June 27, 2017**

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 be 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  
919 Ala Moana Boulevard, Room 203  
Honolulu, HI 96814**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:**

**Expiration Date: June 27, 2017**

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 form(s):
  - a. Annual Emissions Report Form: Boilers; and
  - b. Annual Emissions Report Form: Diesel Engine Generators.
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  
919 Ala Moana Boulevard, Room 203  
Honolulu, HI 96814**

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 manufacture, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE 1 OF \_\_\_)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

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

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

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company/Facility Name: \_\_\_\_\_

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

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

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**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE 2 OF \_\_\_)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

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

**Instructions:**

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

**A. Attachment I, Standard Conditions**

<u>Permit term/condition</u> All standard conditions	<u>Equipment</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
---------------------------------------------------------	--------------------------------------------------------	---------------------------------------------------------------------------------------------------

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

<u>Permit term/condition</u> All monitoring conditions	<u>Equipment</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All recordkeeping conditions	<u>Equipment</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All reporting conditions	<u>Equipment</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All testing conditions	<u>Equipment</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
<u>Permit term/condition</u> All INSIG conditions	<u>Equipment</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE \_\_\_ OF \_\_\_)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

**C. Special Conditions - Operational and Emissions Limitations**

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

<u>Permit term/condition</u>	<u>Equipment</u>	<u>Method</u>	<u>Compliance</u>
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
		<input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

**(Make Additional Copies if Needed)**

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE \_\_\_ OF \_\_\_)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

**D. Deviations**

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

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

**(Make Additional Copies if Needed)**

**ANNUAL EMISSIONS REPORT FORM  
BOILERS  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:** \_\_\_\_\_

**Expiration Date:** June 27, 2017

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

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment:

- 1) Kipper & Sons Engineers, Inc., biomass/oil fired boiler (main boiler), serial no. 1174 (25,000 lb/hr steam capacity/35.7 MMBtu/hr with 15 MMBtu/hr Peabody oil burner).
- 2) PPC Industries electrostatic precipitator (ESP), job no. 1249, model no. S10-820-1S, servicing the main boiler.
- 3) Superior Boiler Works 350 hp boiler (back-up boiler), model no. 7-X-1750-S250-PFCF-A2, serial no. 14090213, with 14.7 MMBtu/hr Power Flame Inc. burner, model no. CM10-O, serial no. 101351784.

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

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

BIOMASS CONSUMPTION		
Boiler Unit	Capacity (MMBtu/hr)	Total Consumption (tons/year)
Kipper & Sons Engineers, Inc. Main Boiler	35.7	

USED OIL CONSUMPTION			
Boiler Unit	Capacity (MMBtu/hr)	Maximum % Sulfur Content by Weight	Total Consumption (gallons/year)
Kipper & Sons Engineers, Inc. Main Boiler	15		

ULTRA-LOW SULFUR DIESEL CONSUMPTION			
Boiler Unit	Capacity (MMBtu/hr)	Maximum % Sulfur Content by Weight	Total Consumption (gallons/year)
Superior Boiler Works Back-up Boiler	14.7		

**ANNUAL EMISSIONS REPORT FORM  
DIESEL ENGINE GENERATORS  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:** \_\_\_\_\_

**Expiration Date:** June 27, 2017

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

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment:

- 1) 460 kW Detroit diesel engine generator, model no. 450-XC6DT3, serial no. 06r1051227.
- 2) 460 kW Detroit diesel engine generator, model no. 450-XC6DT3, serial no. 06r1051231.

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

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

ULTRA-LOW SULFUR DIESEL CONSUMPTION			
Diesel Engine Generator	Capacity (kW)	Maximum % Sulfur Content by Weight	Total Consumption (gallons/year)
Serial No. 06r1051227	460		
Serial No. 06r1051231	460		

**MONITORING REPORT FORM  
BOILERS  
COVERED SOURCE PERMIT NO. 0317-02-C  
(PAGE 1 OF 3)**

**Issuance Date:** \_\_\_\_\_

**Expiration Date:** June 27, 2017

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

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment:

- 1) Kipper & Sons Engineers, Inc., biomass/oil fired boiler (main boiler), serial no. 1174 (25,000 lb/hr steam capacity/35.7 MMBtu/hr with 15 MMBtu/hr Peabody oil burner).
- 2) PPC Industries electrostatic precipitator (ESP), job no. 1249, model no. S10-820-1S, servicing the main boiler.
- 3) Superior Boiler Works 350 hp boiler (back-up boiler), model no. 7-X-1750-S250-PFCF-A2, serial no. 14090213, with 14.7 MMBtu/hr Power Flame Inc. burner, model no. CM10-O, serial no. 101351784.

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

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

1. Report all incidents when the ESP secondary voltage was less than 30 kV during the reporting period:

Beginning Time and Date	Ending Time and Date	Corrective Action

**MONITORING REPORT FORM  
BOILERS  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE 2 OF 3)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

2. Report the maximum pollutant concentrations in the table below from the used oil fired by the main boiler for the reporting period:

Pollutant	Maximum Concentration (ppm)	Maximum % by Weight	Notes
Sulfur	N/A		
Arsenic		N/A	
Cadmium			
Chromium			
Lead			
Total Halogens			
PCBs			

3. Report all incidents when more than one (1) boiler operated at any one time:

Date	Duration of Simultaneous Operation	Comments

**MONITORING REPORT FORM  
BOILERS  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE 3 OF 3)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

4. Report the maximum sulfur content of the fuels fired in the back-up boiler for the reporting period:

Boiler Unit	Types of Fuel Fired	Maximum % Sulfur Content by Weight
Superior Boiler Works Back-up Boiler	Ultra-Low Sulfur Diesel	

5. Please provide all fuel supplier certifications in accordance with Attachment IIA, Special Condition No. D.11.

I certify that the records of fuel supplier certifications submitted represent all of the fuel combusted in the back-up boiler during the report period.

**MONITORING REPORT FORM  
DIESEL ENGINE GENERATORS  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:** \_\_\_\_\_

**Expiration Date:** June 27, 2017

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

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment:

- 1) 460 kW Detroit diesel engine generator, model no. 450-XC6DT3, serial no. 06r1051227.
- 2) 460 kW Detroit diesel engine generator, model no. 450-XC6DT3, serial no. 06r1051231.

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

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

1. Report the maximum sulfur content and the minimum cetane index or maximum aromatic content of the fuels fired in the diesel engine generator for the reporting period:

Equipment Description	Types of Fuel Fired	Maximum Sulfur Content (% by Weight)	Minimum Cetane Index	Maximum Aromatic Content (Volume %)
Diesel Engine Generators	Ultra-low Sulfur Diesel			

**MONITORING REPORT FORM  
BOILER TUNE-UP  
COVERED SOURCE PERMIT NO. 0317-02-C  
(PAGE 1 OF 2)**

**Issuance Date:** \_\_\_\_\_

**Expiration Date:** June 27, 2017

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 within sixty (60) days after each boiler tune-up:

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

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

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

Boiler Description: \_\_\_\_\_

Date(s) of Boiler Tune-up: \_\_\_\_\_

1. Report the CO concentrations in the effluent stream in ppm, by volume, and oxygen in volume percent, before and after the tune-up of the boiler:

Boiler Before Tune-up	
CO Concentration (ppm by Volume)	Oxygen (Volume Percent)
Boiler After Tune-up	
CO Concentration (ppm by volume)	Oxygen (volume percent)

2. Report the corrective actions taken as part of the boiler tune-up for the reporting period:

Corrective Action Description

**MONITORING REPORT FORM  
BOILER TUNE-UP  
COVERED SOURCE PERMIT NO. 0317-02-C  
(CONTINUED, PAGE 2 OF 2)**

**Issuance Date:**

**Expiration Date: June 27, 2017**

3. Report the type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period:

Types of Fuel Fired	Period of Consumption	Total Fuel Consumption	Units of Measure

**BIENNIAL/5-YEAR COMPLIANCE CERTIFICATION REPORT FORM  
BOILER  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:** \_\_\_\_\_

**Expiration Date:** June 27, 2017

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health and U.S. EPA, Region 9, the following information biennially or every 5-years, as applicable:

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

Facility Name: \_\_\_\_\_

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

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

1. Provide in the table below, information on whether or not the boiler complied with all relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ:

Boiler Description	Does the Boiler Comply with 40 CFR Part 63, Subpart JJJJJJ?		Date of Most Recent Boiler Tune-up
	Yes	No	

2. "This facility complies with the requirements of 40 CFR §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." Yes \_\_\_\_\_ No \_\_\_\_\_



**VISIBLE EMISSIONS FORM REQUIREMENTS  
STATE OF HAWAII  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:**

**Expiration Date: June 27, 2017**

The **Visible Emissions (VE) Form** shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9, or U.S. EPA approved equivalent methods, or alternative methods with prior written approval from the Department of Health. The VE Form shall be completed as follows:

1. VE observations shall take place during the day only. The opacity shall be noted in five (5) percent increments (e.g., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the VE Form using the symbols as shown.
3. For VE observations of stacks, stand at least three (3) stack heights but not more than a quarter mile from the stack.
4. For VE observations of fugitive emissions from crushing and screening plants, stand at least 4.57 meters (15 feet) from the visible emissions source, but not more than a quarter mile from the visible emission source.
5. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
6. The six (6) minute average opacity reading shall be calculated for each observation.
7. 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 the maximum permitted capacity.
8. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed VE 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.

Any required initial and annual performance test performed in accordance with Method 9 by a certified reader shall satisfy the respective equipment's VE monitoring requirements for the month the performance test is performed.

**VISIBLE EMISSIONS FORM  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:** \_\_\_\_\_

**Expiration Date: June 27, 2017**

(Make Copies for Future Use for Each Stack or Emission Point)

Company Name: \_\_\_\_\_

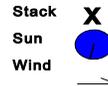
For stacks, describe equipment and fuel: \_\_\_\_\_

For fugitive emissions from crushers and screens, describe:

Fugitive emission point: \_\_\_\_\_

Plant Production (tons/hr): \_\_\_\_\_

(During observation)



Draw North Arrow



**Site Conditions:**

Emission point or stack height above ground (ft): \_\_\_\_\_

Emission point or stack distance from observer (ft): \_\_\_\_\_

Emission color (black or white): \_\_\_\_\_

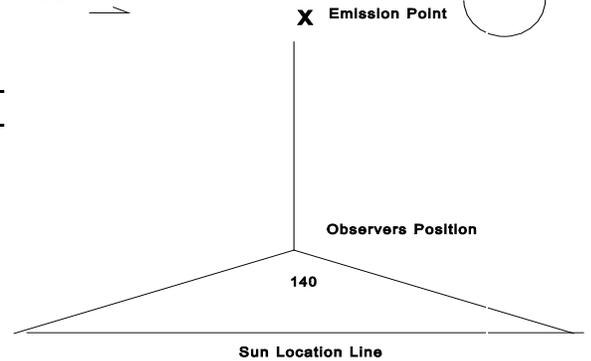
Sky conditions (% cloud cover): \_\_\_\_\_

Wind speed (mph): \_\_\_\_\_

Temperature (EF): \_\_\_\_\_

Observer Name: \_\_\_\_\_

Certified? (Yes/No): \_\_\_\_\_



Observation Date and Start Time: \_\_\_\_\_

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

Observation Date and Start Time: \_\_\_\_\_

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

**COMPLIANCE ASSURANCE MONITORING PLAN  
PARTICULATE  
COVERED SOURCE PERMIT NO. 0317-02-C**

**Issuance Date:**

**Expiration Date: June 27, 2017**

**I. Background**

A. Emissions Unit

Main Boiler with Electrostatic Precipitator

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulation: HAR §11-60.1-36

Emissions Limit: 0.40 pound PM/100 pound of biomass burned

C. Control Technology

Electrostatic Precipitator

**II. Monitoring Approach**

A. Indicators

Secondary voltage measured by voltmeter  
Audible alarm and light activates if excursion measured

B. Measurement Approach

Continuous monitoring of secondary voltage with voltmeter  
Recording in a log the secondary voltage each hour

C. Indicator Range

An excursion is a secondary voltage measured by the ESP at voltmeter that is greater than 30 kV

D. Performance Criteri

Data Representativeness:	Voltmeter operated and maintained in accordance with manufacturer's specification.
Verification of Operational Statuts:	Completion of the manufacturer's written requirements for installation, operation of the voltmeter.
QA/QC Practices and Criteria:	Voltmeter maintained in accordance with manufacturer's recommendations.
Monitoring Frequency:	Secondary voltage measure continuously. Secondary voltage recorded in log each hour.