

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

August 31, 2011

11-582E CAB
File No. 0724-01

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(7009 2820 0001 6573 4673)

Mr. John C. Silvia
Chief Executive Officer
Hu Honua Bioenergy, LLC
Administration Office
1 Embarcadero Center, Suite 2860
San Francisco, California 94111

Dear Mr. Silvia:

Subject: Covered Source Permit (CSP) No. 0724-01-C
Application for Initial Permit No. 0724-01
Hu Honua Bioenergy, LLC
Bioenergy Facility
Located at: 28-283 Sugar Mill Road, Pepeekeo, Hawaii
Date of Expiration: August 30, 2016

The subject covered source permit is issued in accordance with Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The covered source permit is based on the plans, specifications, and information submitted as part of your application received on August 28, 2009 and additional information submitted on January 5, 2010, January 11, 2010, January 12, 2010, January 22, 2010, February 23, 2010, May 19, 2010, May 24, 2010, June 7, 2010, June 14, 2010 and the revised application received on December 27, 2010 and additional information submitted on December 28, 2010, January 24, 2011, January 31, 2011, and February 7, 2011. A receipt for the application filing fee of \$5,000.00 is enclosed.

The covered source permit is issued subject to the conditions and requirements set forth in the following attachments:

Attachment I: Standard Conditions
Attachment II: Special Conditions
Attachment II - INSIG: Special Conditions - Insignificant Activities
Attachment III: Annual Fee Requirements
Attachment IV: Annual Emissions Reporting Requirement

Mr. John C. Silvia
August 31, 2011
Page 2

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

Compliance Certification Form
Annual Emissions Report Form: Fuel and Production
Monitoring Report: Boiler Fuel, ESP and Baghouse, Emission Caps
Excess Emission and Monitoring System Performance Summary Report

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 Hawaii Department of Health, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,



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

DL:nn
Enclosures

c: Ed Yamamoto, EHS – Hilo
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0724-01-C**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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

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

(Auth.: HAR §11-60.1-90)
2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be willfully defaced, altered, forged, counterfeited, or falsified.

(Auth.: HAR §11-60.1-6; SIP §11-60-11)²
3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department of Health, except as provided in HAR, Section 11-60.1-91.

(Auth.: HAR §11-60.1-7; SIP §11-60-9)²
4. A request for transfer from person to person shall be made on forms furnished by the Department of Health.

(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the U.S. Environmental Protection Agency (EPA), Region 9.

(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.

(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)
7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

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

soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

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

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

(Auth.: HAR §11-60.1-93)

27. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR,

Section 11-60.1-86, the compliance certification shall be submitted to the Department of Health and the U.S. EPA, Region 9, once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

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

**Clean Air Branch
Environmental Management Division
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)

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

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

**ATTACHMENT II: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0724-01-C**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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

Section A. Equipment Description

1. This permit encompasses the following equipment and associated appurtenances:
 - a. One (1) 407 MMBtu/hr Babcock and Wilcox Boiler, model no. BW 23523, equipped with the following:
 - i. Electrostatic Precipitator and Baghouse (B & W Pulse Jet Fabric Filter or equivalent);
 - ii. Nalco Rotating Opposed Fire Air (ROFA) System or equivalent;
 - iii. Nalco Rotating Mix (ROTAMIX) Urea Injection System or equivalent (SNCR); and
 - iv. Trona or limestone injection system or equivalent.
 - b. One (1) steam powered turbine generator (23.8 MW gross, 21.5 MW net at 0.85 power factor).

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed in Attachment II, Special Condition No. A.1 to show manufacturer, model no., and serial no., where applicable. The identification tag or name plate shall be permanently attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

1. The 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 Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units;
 - c. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and
 - d. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.40b, §63.1, §63.11193)¹

2. The permittee shall comply with all of the 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; 40 CFR Part 60)¹

Section C. Emission Limits

1. Boiler Emission Limits

Emissions for the boiler shall not exceed the limits as shown in the table below:

Boiler Emission Limits		
Pollutant	Emission Limit (lb/hour)	Emission Limit (lb/MMBtu)
CO	69.2 ¹	0.17 ¹
CO	71.6 ²	0.176 ²
NO _x	61.1 ²	0.15 ²
SO ₂	11.4 ²	0.028 ²
PM	9.8 ²	0.024 ²
PM ₁₀	9.8 ²	0.024 ²
PM ₁₀ (filterable)	4.9 ²	0.012 ²
VOC	11.4 ²	0.028 ²
Hydrogen Chloride (HCl)	1.6 ²	0.004 ²

¹ Based on a 30-day rolling average
² Based on a 3-hour average

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-173, 40 CFR §60.43b)¹

2. Boiler CO, NO_x, SO₂, VOC and HCl Emissions

The NO_x, SO₂, VOC and HCl emission limits shall be complied with at all times, except during boiler startup and shutdown. The CO emission limit shall be based on a thirty-day (30-day) rolling average when monitored by the CO continuous emissions monitoring system required in Attachment II, Special Condition No. E.8 and shall be complied with at all

times, except during boiler startup and shutdown. The CO emission limit shall be based on a 3-hour average when conducting the performance test required in Attachment II, Special Condition No. G.1.a.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-173)¹

3. Boiler PM Emissions

The PM emission limit shall be complied with at all times, except during boiler startup, shutdown, and malfunction.

(Auth.: HAR §11-60.1-3, §11-60.1-36, §11-60.1-90, §11-60.1-161; 40 CFR §60.43b)¹

4. Boiler Opacity of Visible Emissions

- a. The opacity limit of twenty (20) percent shall be complied with at all times, except during boiler startup, shutdown, or malfunction.
- b. For any six (6) minute averaging period, the boiler shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during start-up, shutdown, or equipment breakdown, the boiler may exhibit visible emissions greater than twenty (20) percent opacity, but not exceeding sixty (60) percent opacity, for a period aggregating not more than six (6) minutes in any sixty (60) minute period.
- c. The opacity shall be maintained to less than or equal to ten (10) percent opacity (daily block average).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, §11-60.1-161, §11-60.1-173; 40 CFR §60.43b)¹

5. The ammonia (NH₃) slip for the urea injection system shall remain below 40 ppmvd at three (3) percent O₂.

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

6. The CO and NO_x emissions from the facility, including during boiler startups and shutdowns, shall not equal or exceed 250 tons per year, on any rolling twelve-month (12-month) period.

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

7. The total of all HAPs emissions and any individual HAP emissions from the facility, including during boiler startups and shutdowns, shall not equal or exceed 25 tons per year and 10 tons per year, respectively, on any rolling twelve-month (12-month) period.

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

8. This source is exempt from a Prevention of Significant Deterioration (PSD) review and 40 CFR Part 63, Subpart DDDDD due to the emission limits in Attachment II, Special Conditions Nos. C.6 and C.7. Any relaxation in these limits that increases the potential to

emit above the applicable PSD and/or MACT thresholds will require a PSD and/or MACT evaluation of the source as though construction had not yet commenced on the source.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, 40 CFR §52.21(r)(4))¹

Section D. Operational Limits

1. Boiler

a. Fuel Usage

The boiler shall only be fired on the following fuels:

- i. Wood fuel;
- ii. Biodiesel (B100), Grade S15; and
- iii. The combined fuel usage of wood fuel and biodiesel (S15) shall not exceed a maximum of 2,800,000 MMBtu per rolling twelve-month (12-month) period.

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

b. Wood Fuel

- i. All wood fuel, including wood processed into pellets which may utilize a polyethylene binder, fired by the boiler, shall be untreated and uncontaminated by paint, glues, preservatives, oils, added chemicals, or similar foreign substances. Use of construction demolition debris of any type as wood fuel is explicitly prohibited.
- ii. Wood fuel shall consist of chips or pellets of uncontaminated whole tree wood, including stumps, branches, bark, chips, and sawdust.

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

c. Biodiesel

- i. Biodiesel (S15) usage during startup shall not exceed a maximum of 3,300 gallons per rolling twelve-month (12-month) period.
- ii. The Department of Health may, at any time, require the permittee to conduct an analysis of the constituents and properties of the biodiesel and establish limits to ensure compliance with any federal or state requirements.
- iii. The permit conditions prescribed herein may at any time be revised by the Department of Health to reflect federal or state promulgated rules on biodiesel. The Department of Health also reserves the right to impose additional operational controls and restrictions to abate odors if a site inspection indicates controls and/or restrictions are necessary to further control the burning of biodiesel.

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

d. Boiler Startup and Shutdown

- i. Each startup shall not exceed three (3) hours.
- ii. Minimize startup and shutdown periods per manufacturer's recommendations.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, 40 CFR §63.11214)¹

2. Boiler Electrostatic Precipitator (ESP), Baghouse, and Nalco Rotating Mix (ROTAMIX) Urea Injection System or equivalent (SNCR)

a. ESP

- i. The ESP shall be installed, operated, and maintained at all times during operation of the boiler. The permittee shall not operate the boiler if a problem affecting PM control efficiency of the ESP is observed or apparent at any time that could cause the ESP to be operated outside of the normal range. The permittee shall investigate and correct the problem(s) before resuming boiler operation.
- ii. The ESP operating voltage shall be maintained in accordance with the manufacturer's specifications.

b. Baghouse

- i. The baghouse shall be installed, operated, and maintained at all times during operation of the boiler. The permittee shall not operate the boiler if a problem affecting PM control efficiency of the baghouse is observed or apparent at any time that could cause the baghouse to be operated outside of the normal range. The permittee shall investigate and correct the problem(s) before resuming boiler operation.
- ii. The pressure drop across the baghouse shall be maintained at 1" to 7" H₂O.
- iii. The permittee shall follow a regular maintenance schedule as recommended by the manufacturer to ensure the following items of the baghouse are operated properly:
 - 1) The filter bags are checked for any leaks, holes, abrasions, and scuffs; and replaced as needed.
 - 2) The hopper is discharged in a timely manner to prevent excessive particulate buildup which could cause compaction, overflow, or plugging.
 - 3) The cleaning system is maintained and operated at sufficient intervals to minimize particulate buildup or caking on the filter bags.
 - 4) Other miscellaneous items/equipment essential for the effective operation of the baghouse are maintained.

c. SNCR

The SNCR shall be installed, operated, and maintained as necessary to achieve the NO_x emission limits during operation of the boiler. The permittee shall not operate the boiler if a problem affecting the NO_x control efficiency of the SNCR is observed or

apparent at any time that could cause the SNCR to be operated outside of the normal range. The permittee shall investigate and correct the problem(s) before resuming boiler operation.

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

3. Fugitive Dust and Emissions

- a. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, dust screens, etc.) at stockpiles and throughout the facility. The Department of Health may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- b. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions of fugitive dust beyond the lot line of the property boundary on which the emissions originate.

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

4. Plant Maintenance

All equipment listed in Attachment II, Special Condition No. A.1 shall be maintained in good operating condition at all times with scheduled inspections and maintenance as recommended by the manufacturer, or as needed.

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

5. To demonstrate continuous compliance with the HCl emission limit specified in Attachment II, Special Condition No. C.1, the permittee shall maintain a minimum twelve-hour (12-hour) average sorbent injection rate as determined in Attachment II, Special Condition No. G.1.b.v during performance testing.

(Auth.: HAR §11-60.1-173)

6. Boiler Tune-ups

Upon startup and **biennially** thereafter, the permittee shall conduct or cause to be conducted, a tune-up of the boiler in accordance with the requirements of 40 CFR §63.11223. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

(Auth.: 40 CFR §63.11223)¹

Section E. Monitoring and Recordkeeping Requirements

1. Records

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

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

2. Boiler

a. Daily Records on Steam Load

The permittee shall record and maintain daily records on the boiler. Records shall include:

- i. Calendar date;
- ii. Number of hours that the boiler was operated each day;
- iii. Hourly steam load; and
- iv. Amount of each type of fuel (wood or biodiesel (S15)) combusted each day in the boiler.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §60.49b(d))¹

b. Annual Capacity Factor

- i. Annual capacity factor is defined as the ratio between the actual heat input to the boiler from a particular fuel during a calendar year and the potential heat input to the steam generating unit had the boiler been operated for 8,760 hours during a calendar year at its maximum steady state design heat input capacity.
- ii. The annual capacity factor shall be calculated for wood fuel. The annual capacity factor shall be determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §60.43b(e), §60.49b(d))¹

c. Wood Fuel

i. Wood Feed Rate

The permittee shall install, operate and maintain a non-resetting weigh scale for the continuous and permanent recording of the total amount of wood fuel fed to

the boiler, in pounds. All wood fuel fed to the boiler shall be recorded by the weigh scale monitoring system.

- (1) The following information shall be recorded on a daily basis:
 - (a) Date of the meter reading;
 - (b) Beginning meter reading for the day;
 - (c) Ending meter reading for the day; and
 - (d) Total amount of wood fed to the boiler, in pounds, for the day.
- (2) The following information shall be recorded on a monthly basis:
 - (a) Total amount of wood fed to the boiler, in pounds, for each month; and
 - (b) Total amount of wood fed to the boiler, in pounds, on a rolling twelve-month (12-month) basis.
- (3) The permittee shall record on a calendar annual basis the total amount of wood fed to the boiler, in pounds, to determine the annual capacity factor and to report on annual emissions.
- (4) The weigh scale shall be calibrated on a monthly basis or more frequently as recommended by the manufacturer. Each calibration of the weigh scale shall be recorded on the Inspection, Maintenance, and Repair Log of Attachment II, Special Condition No. E.4. Upon written request and justification, the Department of Health may approve a less frequent calibration schedule if it can be demonstrated that the weigh scale, due to minimum variations, need not be calibrated on a monthly basis. The calibration schedule for the weigh scale shall be no less frequent than on a monthly basis for the first year of operation or as recommended by the manufacturer.
- (5) 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.

ii. Wood Heat Input

Total wood heat input to the boiler shall be recorded on a monthly and rolling twelve-month (12-month) basis. The total monthly wood heat input to the boiler shall be determined by multiplying the total pounds of wood fed to the boiler for each month from Attachment II, Special Condition No. E.2.c.i.(2)(a) by the wood's higher heating value of Attachment II, Special Condition No. E.2.c.iii.(1) for the month.

iii. Wood Sampling and Analysis

- (1) On a **monthly basis**, the wood shall be sampled and analyzed in accordance with the wood sampling protocol of Attachment II, Special

Condition No. F.4, to determine the higher heating value of the fuel. Samples shall be collected for analysis at least once per calendar month. Samples shall be collected at least **twenty (20) days** from the last sample collected or less as approved by the Department of Health.

- (2) On a **quarterly basis**, the wood shall be sampled and analyzed in accordance with the wood sampling protocol of Attachment II, Special Condition No. F.4, to determine the proximate and ultimate analysis, and the chlorine content of the fuel. Samples shall be collected for analysis at least once per calendar quarter. Samples shall be collected at least **sixty (60) days** from the last sample collected or less as approved by the Department of Health. Upon written request and justification, the Department of Health may approve a less frequent sampling and analysis schedule if it can be demonstrated that there are minimum variations in the wood fuel characteristics. The sampling and analysis schedule shall be no less frequent than on a quarterly basis for the first year of operations.

iv. Vendors or Sources of Wood Fuel

Records shall be maintained on vendors or sources furnishing wood fuel for use in the boiler. Records shall include:

- (1) Date that wood fuel for the boiler is delivered to the facility;
- (2) Name of the vendor or source;
- (3) Description of the wood fuel accepted for use in the boiler (the description shall include tree species and tree section such as bark, leaves, branches, trunk, etc.); and
- (4) Amount of wood fuel (pounds or tons).

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

d. Biodiesel

i. Biodiesel Fuel Meters

The permittee shall install, operate, and maintain non-resetting fuel meters on the boiler, record meter readings, and determine the number of gallons of biodiesel (S15) fired in the boiler. Records shall include:

- (1) Date of meter reading;
- (2) Time of meter reading;
- (3) Reading at the beginning of each day;
- (4) Total gallons of biodiesel (S15) used on a monthly and rolling twelve-month (12-month) basis; and
- (5) Total biodiesel (S15) heat input on a monthly and rolling twelve-month (12-month) basis.

Records on the gallons of biodiesel (S15) used shall be used to report on annual emissions.

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.

ii. Biodiesel Purchase Receipts

Biodiesel purchase receipts, showing the supplier, delivery date, and amount of fuel (gallons) delivered to the site for use in the boiler shall be maintained along with any biodiesel laboratory analyses or data on biodiesel constituents and properties.

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

e. Boiler Tune-ups

The permittee shall maintain records identifying the boiler, date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §63.11225)¹

f. Monthly Fuel Records

The permittee shall maintain records documenting the fuel type(s) used monthly.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §63.11225)¹

3. ESP Voltages

- a. The voltages of the ESP shall be checked routinely, or at least once per day when the facility is operating, to ensure effective collection of PM is occurring and to determine whether maintenance is required pursuant to Attachment II, Special Condition No. D.4.
- b. Written records shall be maintained on the operating voltages of the ESP each day.
- c. Maintain records of the occurrence and duration of each malfunction of the ESP and of any corrective actions taken to minimize emissions or restore the ESP to normal operating order.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, 40 CFR §63.11225)¹

4. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on equipment inspections, maintenance, and repair work performed on the equipment and associated appurtenances listed in Attachment II,

Special Condition No. A.1, focusing in particular on inspections, maintenance, and repair work that affect air pollutant emissions. Records shall include:

- a. Date that the inspection, maintenance, or repair work was performed;
- b. A description of the findings and any work performed on the equipment covered by this permit, including the parts inspected and repaired; and
- c. Name and title of personnel performing the inspection or work.

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

5. Boiler Continuous Opacity Monitoring System (COMS)

- a. The permittee shall install, operate, calibrate, and maintain a continuous opacity monitoring system (COMS) to measure and record the opacity of emissions from the stack. The span value of the COMS shall be between sixty (60) and eighty (80) percent.
- b. The COMS must be installed, operated and maintained according to 40 CFR §60.13 and Performance Specifications (PS) 1 of 40 CFR Part 60, Appendix B.
- c. A performance evaluation of the COMS must be conducted according to the requirements in 40 CFR §60.13 and PS 1 of 40 CFR Part 60, Appendix B.
- d. The permittee shall maintain records of the occurrence and duration of each malfunction of the COMS and of any corrective actions taken to minimize emissions or restore the COMS to normal operating order.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.13, §60.48b, §63.11225)¹

6. Continuous Parameter Monitoring System (CPMS)

The permittee shall install, operate, calibrate and maintain a Continuous Parameter Monitoring System (CPMS) to measure the sorbent injection rate. The CPMS must complete a minimum of one cycle of operation for each successive fifteen-minute (15-minute) period and have a minimum of four successive cycles of operation to have a valid hour of data. The CPMS must be in continuous operation whenever the boiler is in operation. The CPMS shall be located in a position that provides a representative measurement of the total sorbent injection rate and installed and calibrated in accordance with the manufacturer's procedures and specifications. The CPMS shall be calibrated at least annually in accordance with the manufacturer's procedures and specifications.

(Auth.: HAR §11-60.1-173)¹

7. HCl Continuous Emissions Monitoring System (CEMS)

The permittee shall install, operate, calibrate and maintain a HCl Continuous Emissions Monitoring System (CEMS). The HCl CEMS must be in continuous operation whenever the

boiler is in operation. The HCl CEMS shall be calibrated in accordance with the manufacturer's procedures and specifications.

(Auth.: HAR §11-60.1-173)¹

8. CO Continuous Emissions Monitoring System (CEMS)

- a. The permittee shall install, operate, calibrate and maintain a CO Continuous Emissions Monitoring System (CEMS). The CO CEMS must be in continuous operation whenever the boiler is in operation.
- b. The CO CEMS must be installed, operated and maintained according to Performance Specifications (PS) 4A of 40 CFR Part 60, Appendix B.
- c. A performance evaluation of the CO CEMS must be conducted according to the requirements in §63.8 and PS 4A of 40 CFR Part 60, Appendix B.
- d. The CO CEMS shall be equipped with a dual range monitor to determine compliance with the emission limits in Attachment II, Special Condition No. C.1. The range of detection and span shall be selected as recommended by the manufacturer.

(Auth.: HAR §11-60.1-3, §11-60.1-90)¹

9. NO_x Continuous Emissions Monitoring System (CEMS)

- a. The permittee shall install, operate, calibrate and maintain a NO_x Continuous Emissions Monitoring System (CEMS). The NO_x CEMS must be in continuous operation whenever the boiler is in operation.
- b. The NO_x CEMS must be installed, operated and maintained according to Performance Specifications (PS) 2 of 40 CFR Part 60, Appendix B.
- c. A performance evaluation of the NO_x CEMS must be conducted according to the requirements in §63.8 and PS 2 of 40 CFR Part 60, Appendix B.
- d. The NO_x CEMS shall be equipped with a dual range monitor to determine compliance with the emission limits in Attachment II, Special Condition No. C.1. The range of detection and span shall be selected as recommended by the manufacturer.

(Auth.: HAR §11-60.1-3, §11-60.1-90)¹

10. Boiler Startup, Shutdown, and Malfunction Plan

- a. The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) that describes in detail, procedures for operating and maintaining the boiler during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the emission limits specified in Attachment II, Special Conditions Nos. C.1 and C.4.
- b. The permittee shall maintain records of all actions taken during a startup, shutdown, or malfunction of the boiler. If actions taken are inconsistent with the startup, shutdown, and malfunction plan, as specified in Attachment II, Special Condition No. E.10.a, and emissions exceed the limits specified in Attachment II, Special Conditions Nos. C.1 and

C.4, the permittee shall report such actions within **two (2) working days** after commencing said actions, followed by a written report within **seven (7) working days** after the end of the event.

- c. The permittee shall maintain records of the occurrence and duration of each malfunction of the boiler.

(Auth.: HAR §11-60.1-15, 40 CFR §63.11225)¹

11. Ammonia (NH₃) Slip

Records shall be maintained on the amount of ammonia slip from the operation of the urea injection system. The amount of ammonia slip shall be based on the data from the initial and annual performance test required by Attachment II, Section G.

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

12. Baghouse

The permittee shall install, operate and maintain a pressure drop meter on the baghouse to measure the pressure drop across the baghouse. The permittee shall monitor and record this meter at least once daily during operation.

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

13. Flow Meter

The permittee shall install, operate, calibrate and maintain a flow meter to calculate hourly emission rates from the CEMS.

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

14. The permittee shall calculate and record the CO and NO_x emissions from the facility, including during boiler startups and shutdowns, on a monthly and rolling twelve-month (12-month) basis.

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

15. The permittee shall calculate and record the total of all HAPs emissions and all individual HAP emissions from the facility, including during boiler startups and shutdowns, on a monthly and rolling twelve-month (12-month) basis.

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

Section F. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions Nos. 14, 16, 17 and 24, respectively:
 - a. *Anticipated date of initial start-up, actual date of construction commencement, and actual start-up date;*
 - 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)

2. Compliance Certification Form

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

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

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

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

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

3. Deviations

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

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

4. Wood Sampling and Analysis Protocol

At least **sixty (60) days** prior to first fire of the boiler, the permittee shall submit to the Department of Health for approval, in writing, a fuel analysis plan that identifies the fuels to be burned in the boiler, a detailed description of the sample location and the analytical methods, with expected minimum detection levels, to be used for the measurement of chlorine. A minimum of three (3) composite fuel samples for each fuel type must be obtained. Also, a wood sampling and analysis protocol for determining the wood's proximate and ultimate analysis, the chlorine content, and higher heating value of the fuel shall be submitted. The protocol shall address in detail the sampling and testing methodology to ensure the samples collected are representative of the wood fired in the boiler during the sampling period. The protocol shall also identify the requirement that the collection of each sample include a recorded description of the wood samples collected (such as the tree species and tree section such as bark, leaves, branches, trunk, etc.). The permittee shall obtain approval for the sampling protocol prior to the first fire of the boiler.

Manufacturer's literature on the weigh scale required by Attachment II, Special Condition No. E.2.c.i. shall be submitted to the Department of Health along with the wood sampling and analysis protocol. The literature should include information on the accuracy, manufacturer's recommended calibration methods and frequency, and operating details of the weigh scale.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-173)¹

5. Performance Specification Testing

- a. At least **sixty (60) days** prior to conducting a performance specification test on the COMS or CEMS, the permittee shall notify the Department of Health in writing of conducting a performance specification test on the COMS or CEMS. The testing date shall be in accordance with the performance test date identified in 40 CFR §60.13.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7, §60.8, §60.13, §63.9)¹

- b. As of January 1, 2012 and within **sixty (60) days** after the date of completing each performance test, the permittee shall submit relative accuracy test audit data and

performance test data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §63.11225)¹

6. Monitoring Report Forms

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

- a. For the **Monitoring Report: Boiler Fuel, ESP and Baghouse, Emission Caps**, report on:
 - i. The total gallons of biodiesel (S15) fired in the boiler during startup on a monthly and rolling twelve-month (12-month) basis;
 - ii. Any instances where treated wood (e.g., painted or chemically treated wood) was fired in the boiler. If no such instances occurred, state so on the report;
 - iii. Any instances where ESP operating voltage was below the normal range. If there were no such incidents, state so on the report;
 - iv. Any instances where the pressure drop across the baghouse was above the normal range. If there were no such incidents, state so on the report;
 - v. The total heat input of biodiesel (S15) and wood on a monthly and rolling twelve-month (12-month) basis;
 - vi. The CO and NO_x emissions from the facility on a monthly and rolling twelve-month (12-month) basis; and
 - vii. The total of all HAPs emissions and the largest individual HAP emissions from the facility on a monthly and rolling twelve-month (12-month) basis.
- b. Wood Sampling and Analysis

Results of the wood sampling and analysis shall be submitted to the Department of Health. The results shall include the sampling collection date, analyzed date, the proximate and ultimate analysis, the chlorine content of the fuel, the higher heating value of the fuel, a description of the wood samples collected and certification that the wood samples were collected and analyzed according to the wood sampling protocol of Attachment II, Special Condition No. F.4.

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

7. Annual Emissions Reports

As required by Attachment IV, and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including any hazardous air pollutants, during normal

operations and startups and shutdowns. The reporting of annual emissions is due within **sixty (60) days** following *the end of each calendar year*. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension. The permittee shall submit **annually** the **Annual Emissions Report Form: Fuel and Production** to the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

8. Boiler Excess Emissions and Monitor Downtime Reporting

a. The permittee shall submit to the Department of Health and U.S. EPA ,Region 9, an **Excess Emissions and Monitoring Systems Performance Report** in accordance with 40 CFR §60.7(c). Excess emissions and monitor downtimes shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. The **Excess Emissions and Monitoring Systems Performance Report** shall include the following:

- i. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period;
- ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- iv. When no excess emissions have occurred or the continuous monitoring systems have been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. For the purposes of this permit, excess emissions and monitor downtimes shall be defined as follows:

i. Excess Emissions

- (1) Any opacity measurements, as measured by the continuous opacity monitoring system, exceeding the opacity limits set forth Attachment II, Special Condition No. C.4;
- (2) Any rolling 30-day period during which the average emissions of CO, as measured by the continuous emissions monitoring system, exceed the emission limits set forth in Attachment II, Special Condition No. C.1;
- (3) Any 3-hr period during which the average emissions of HCl, as measured by the continuous emissions monitoring system, exceed the emission limits set forth in Attachment II, Special Condition No. C.1; and

- (4) Any 3-hr period during which the average emissions of NO_x, as measured by the continuous emissions monitoring system, exceed the emission limits set forth in Attachment II, Special Condition No. C.1.

ii. Monitor Downtime

A period of monitor downtime shall be any six (6) minute period in which sufficient data was not obtained to validate the opacity.

- c. The enclosed **Excess Emissions and Monitoring System Performance Summary Report** form or an equivalent form shall be submitted in conjunction with the **Excess Emissions and Monitoring Systems Performance Report** of Attachment II, Special Condition No. F.8.a. The reports shall be postmarked by the **30th day** following the end of each **semiannual calendar period**.
- d. Excess opacity indicated by the continuous opacity monitoring system shall be considered violations of the applicable opacity limits for the purposes of this permit. Excess emissions indicated by the continuous emissions monitoring systems (HCl, CO and NO_x CEMS) shall be considered a violation of the applicable emission limits for the purposes of the permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7, §60.13, §60.48b, §63.10)¹

9. Startup, Shutdown and Malfunction (SSM) Reports

The permittee shall submit a startup, shutdown, and malfunction report listing any actions taken, consistent with the SSMP, as specified in Attachment II, Special Condition No. E.10.a, during a startup, shutdown, or malfunction during the reporting period when emissions exceeded the limits specified in Attachment II, Special Conditions Nos. C.1 and C.4. The report shall include a summary of the actions taken to minimize emissions and the number, duration, and a brief description for each type of malfunction. The report shall be delivered or postmarked by the **30th day** following the end of each calendar half.

(Auth.: HAR §11-60.1-15, 40 CFR §63.10)¹

10. Annual Compliance Report

By March 1 of each year, the permittee shall submit to the Department of Health and U.S. EPA, Region 9, an annual compliance report for the previous calendar year containing the following information in accordance with 40 CFR §63.11225:

- a. Company name and address,
b. Statement by a responsible official certifying the truth, accuracy and completeness of the notification,

- c. Descriptions of all deviations occurring during the reporting period, and
- d. The total fuel used and EPA non-waste determination.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-90, 40 CFR §63.11225)¹

Section G. Testing Requirements

1. Boiler Performance Testing

- a. CO, NO_x (as NO₂), SO₂, VOC, PM/PM₁₀, Opacity of Visible Emissions, and NH₃

Within **sixty (60) days** after achieving the maximum production rate of the boiler, but not later than **one hundred eighty (180) days** after initial start-up of the boiler, and **annually** thereafter, the permittee shall conduct, or cause to be conducted, performance tests on the boiler to determine the emission rates of CO, NO_x (as NO₂), SO₂, VOC, PM/PM₁₀, opacity of visible emissions, and NH₃ for the purpose of determining compliance with the emission limits provided for under Attachment II, Special Conditions Nos. C.1 and C.4.

The permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; §11-60.1-161, 40 CFR §60.8, §60.46b)¹

- b. HCl Emissions

- i. Within **sixty (60) days** after achieving the maximum production rate of the boiler, but not later than **one-hundred eighty (180) days** after initial start-up of the boiler, and **annually** thereafter, the permittee shall conduct, or cause to be conducted, performance tests on the boiler to determine the emission rate of HCl for the purpose of determining compliance with the emission limit provided for under Attachment II, Special Condition No. C.1. The source test for HCl emissions shall be performed with the boiler firing wood fuel.
- ii. The test report (as required by Attachment II, Special Condition No. G.8) for the source performance tests for HCl shall include:

- (1) The operating conditions of the boiler at the time of the test;
- (2) The HCl emission rate in lb/MMBtu and lb/hr;
- (3) The proximate and ultimate analysis, the chlorine content of the fuel, the higher heating value of the fuel, and a description of the wood samples collected for each of the three (3) test runs. The collection of the wood sample and the analysis shall follow the wood sampling protocol of Attachment II, Special Condition No. F.4 to ensure the samples collected during the test are representative of the fuel fired in the boiler at the time of the test; and

- (4) The records or a summary of the records containing all of the information maintained in accordance with Attachment II, Special Condition No. E.2.c.iv from the start of boiler operations up until the date of the current performance test.
- iii. The permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction.
- iv. Testing shall be done while burning the fuel with the highest content of chlorine. If a new fuel is burned with a higher chlorine content than used in a previous performance test, a new performance test shall be performed with the new fuel. The emission tests must be performed between **ten (10) months** and **twelve (12) months** after the previous performance test, except as follows:
 - (1) If the results of three (3) consecutive annual HCl emission tests show compliance with the HCl emission limit of Attachment II, Special Condition No. C.1, the permittee may elect to conduct an HCl performance test once every three (3) years with each test conducted no more than thirty-six (36) months after the previous performance test; and
 - (2) If the results of the annual HCl performance test show noncompliance with the HCl emission limit of Attachment II, Special Condition No. C.1, then the permittee shall conduct annual performance tests for HCl until three (3) consecutive annual HCl emission tests show compliance with the HCl emission limit.
- v. The permittee shall establish a minimum sorbent injection rate operating limit that would result in compliance with the HCl emission rate specified in Attachment II, Special Condition No. C.1 during each performance test. Collect sorbent injection rate data every fifteen (15) minutes) during the entire period of the performance test. Determine the average sorbent injection rate for each individual test run in the three-run performance test by computing the average of all the fifteen-minute (15-minute) readings taken during each test run. Establish a new minimum sorbent injection rate operating limit if burning fuel with higher chlorine content than previously tested.

(Auth.: HAR §11-60.1-173)¹

- c. Acetaldehyde, Acrolein, Benzene, Dichloromethane, Formaldehyde, Manganese, Naphthalene, Styrene, and Toluene Emissions
 - i. Within **sixty (60) days** after achieving the maximum production rate of the boiler, but not later than **one hundred eighty (180) days** after initial start-up of the boiler, and **annually** thereafter, the permittee shall conduct, or cause to be conducted, performance tests on the boiler to determine the emission rates of Acetaldehyde, Acrolein, Benzene, Dichloromethane, Formaldehyde, Manganese, Naphthalene, Styrene, and Toluene Emissions in lb/MMBtu and lb/hr. The source test for Acetaldehyde, Acrolein, Benzene, Dichloromethane, Formaldehyde, Manganese,

Naphthalene, Styrene, and Toluene emissions shall be performed with the boiler firing wood fuel.

- ii. The permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction.
- iii. The annual performance test may be waived for up to two (2) consecutive years if the last test results show a compliance margin of at least ten (10) percent of assumed emission factor in the permit review summary.

(Auth.: HAR §11-60.1-173)¹

2. Boiler Test Methods

Performance tests for CO, NO_x, SO₂, VOC, PM/PM₁₀, HCl, opacity of visible emissions, NH₃, Acetaldehyde, Acrolein, Benzene, Dichloromethane, Formaldehyde, Manganese, Naphthalene, Styrene, and Toluene shall be conducted and the results reported in accordance with test methods set forth in 40 CFR §60.8, 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The performance tests shall be conducted at the maximum expected capacity of the boiler. The following test methods or U.S. EPA approved equivalent methods or other methods with prior written consent from the Department of Health shall be used.

- a. Performance tests for CO emissions shall be conducted using EPA Methods 1-4, 10 and 19;
- b. Performance tests for NO_x emissions shall be conducted using EPA Methods 1-4, 7E and 19;
- c. Performance tests for SO₂ emissions shall be conducted using EPA Methods 1-4, and 6 or 6c;
- d. Performance tests for VOC emissions shall be conducted using EPA Methods 1-4 and 25;
- e. Performance tests for PM/PM₁₀ emissions shall be conducted as provided under Attachment II, Special Condition No. G.3;
- f. Performance tests for HCl emissions shall be conducted using EPA Methods 1-4 and Method 26 or 26A;
- g. During the initial performance test, compliance with the opacity standard of Attachment II, Special Condition No. C.4, shall be determined in accordance with 40 CFR §60.46b(d)(7) and §63.11224(e)(2). The permittee shall record COMS data produced during the initial performance test and shall furnish the Department of Health a written report of the monitoring results along with the Method 9 and 40 CFR §60.8 and §63.7 performance test results;
- h. During the annual performance tests, compliance with the opacity standard of Attachment II, Special Condition No. C.4 shall be determined with COMS data collection in accordance with 40 CFR §60.11(e)(5);
- i. Performance tests for NH₃ emissions shall be conducted using EPA Conditional Test Method 027 (CTM-027);
- j. Performance tests for Acetaldehyde, Acrolein, Benzene, Dichloromethane, Formaldehyde, Naphthalene, Styrene, and Toluene shall be conducted using EPA Method 320;

- k. Performance test for Manganese shall be conducted using EPA Method 29; and
- l. The performance tests shall consist of three (3) separate runs for each pollutant using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; §11-60.1-161, §11-60.1-173, 40 CFR Part 60 Appendix A, §60.8, §60.46b, §63.7, §63.11224(e)(2))¹

3. Boiler PM/PM₁₀ Performance Tests

- a. Method 1 shall be used for sample and velocity traverse.
 - i. Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Department of Health when necessitated by process variables or other factors.
 - ii. Note that Method 1 cannot be used under the following conditions:
 - (1) Cyclonic or swirling gas flow at the sampling location;
 - (2) Stack duct with a diameter less than twelve (12) inches or a cross-sectional area less than 113 square inches; and
 - (3) Sampling location less than two (2) stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.
- b. Method 2 shall be used for velocity and volumetric flow rate.
- c. Method 3A shall be used for gas analysis.
- d. Method 4 shall be used for moisture content of stack gases.
- e. Method 5 shall be used for filterable PM, Method 202 for condensible PM, and 201A for filterable PM₁₀.
 - i. For Method 5, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 120 plus or minus 14°C (248 plus or minus 25°F).
 - ii. Particulate emissions shall be reported in two (2) categories:
 - (1) Front half (filter and probe); and
 - (2) 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.
 - iii. For each run, the emission rate expressed in nanograms per joule heat input shall be determined using:
 - (1) The oxygen or carbon dioxide measurements and PM measurements obtained under 40 CFR §60.46b;

- (2) The dry basis F factor; and
 - (3) The dry basis emission rate calculation procedure contained in Method 19.
- f. The performance test 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 shall apply. For each test run, the following operating parameters shall be recorded and reported:
- i. Wood fuel feed rate measured in tons per hour;
 - ii. Boiler steam rate in pounds per hour; and
 - iii. Voltage readings for the dry ESP servicing the boiler.
- g. For each run, the PM 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 PM in pounds/dscf, as determined in accordance with Method 5.
- h. For each run, the PM concentration shall be converted to pounds/MMBtu using the F-factor methodology of Method 19.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; §11-60.1-161, 40 CFR Part 60 Appendix A, §60.8, §60.46b, §63.7)¹

4. Test Expense and Monitoring

The performance tests shall be made at the expense of the permittee and shall be conducted at the maximum expected operating capacity of the boiler. All performance tests may be monitored by the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.8, §63.7)¹

5. Test Plan

At least **sixty (60) days** prior to conducting a performance test, the permittee shall submit a written performance test plan to the Department of Health and U.S. EPA, Region 9, that includes test dates and duration, test locations, test methods, source operation, and other parameters that may affect the test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.8, §63.7)¹

6. Test Scheduling

In the event the initially scheduled performance test is unable to be conducted due to unforeseeable circumstances beyond the permittee's control, the permittee shall submit a notice to the Department of Health as soon as practicable and without delay prior to the

scheduled performance test data and specify the date when the performance test is rescheduled.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.8, §63.7)¹

7. Test Deviations

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

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.8, §63.7)¹

8. Test Report

Within **sixty (60) days** after completion of a performance test, the permittee shall submit to the Department of Health and U.S. EPA, Region 9 the test report which shall include the operating conditions of the facility at the time of the test, the summarized test results, a comparison of test results to permit emission limits, pertinent support calculations, and field and laboratory data. The results shall be recorded and reported in accordance with 40 CFR §60.8 and 40 CFR Part 60, Appendix A.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.8, §63.10)¹

9. Test Waiver

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

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §60.8, §63.7)¹

Section H. Agency Notification

Any document (including reports) that is 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)

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

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

**ATTACHMENT II - INSIG
SPECIAL CONDITIONS - INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0724-01-C**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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

Section A. Equipment Description

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

(Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

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

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

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

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

Section C. Monitoring and Recordkeeping Requirements

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. All records shall be maintained for at least 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 of Health 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 of Health and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

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

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

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

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

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

Section E. Agency Notification

Any document (including reports) required to be submitted by this 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. 0724-01-C**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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. 0724-01-C**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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):

Annual Emissions Report Form: Fuel and Production

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. 0724-01-C
PAGE 1 OF ____

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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.

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0724-01-C
(CONTINUED, PAGE 2 OF ____)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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(s)</u> All Equipment(s) 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(s)</u> All Equipment(s) 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(s)</u> All Equipment(s) 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(s)</u> All Equipment(s) 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(s)</u> All Equipment(s) 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(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0724-01-C
(CONTINUED, PAGE ____ OF ____)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

C. Special Conditions - Operational and Emissions Limitations

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

Permit term/condition	Equipment(s)	Method	Compliance
		<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. 0724-01-C
(CONTINUED, PAGE ____ OF ____)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

D. Deviations

<u>Permit Term/Condition</u>	<u>Equipment(s) / Brief Summary of Deviation</u>	<u>Deviation Period time (am/pm) & 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: FUEL AND PRODUCTION
COVERED SOURCE PERMIT NO. 0724-01-C**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility: _____

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

Responsible Official (print): _____ Title: _____

Responsible Official (signature): _____

Fuel Usage and Annual Capacity Factor: In Table 1, report on the quantity of each fuel used by the boiler and on the annual capacity factor for wood fuel.

Table 1: Boiler Fuel Usage and Annual Capacity Factor		
Fuel	Annual Usage	Annual Capacity Factor
Wood	(tons)	
Biodiesel (S15)	(gallons)	N/A

**MONITORING REPORT FORM: BOILER FUEL, ESP AND BAGHOUSE,
EMISSION CAPS
COVERED SOURCE PERMIT NO. 0724-01-C
(PAGE 1 OF 5)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility: _____

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

Responsible Official (Print): _____ Title: _____

Responsible Official (Signature): _____

Biodiesel (S15) Fuel Usage During Startup:

Table 1: Biodiesel Usage		
Month	Monthly Basis (gallons)	Rolling 12-Mo. Basis (gallons)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

**MONITORING REPORT FORM: BOILER FUEL, ESP AND BAGHOUSE,
EMISSION CAPS
COVERED SOURCE PERMIT NO. 0724-01-C
(PAGE 2 OF 5)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

Treated Wood: In Table 2, report on any instances where treated wood was fired in the boiler during the reporting period. Include instances where wood fired was painted or chemically treated. If no such incidents occurred, state so below.

Table 2: Treated Wood Fuel		
Date	Type of Treated Wood	Quantity Fired

Table 3: ESP Operating Voltage Below Normal			
Date	Start Time	End Time	Corrective Action Taken

Table 4: Baghouse Pressure Drop Above Normal			
Date	Start Time	End Time	Corrective Action Taken

**MONITORING REPORT FORM: BOILER FUEL, ESP AND BAGHOUSE,
EMISSION CAPS
COVERED SOURCE PERMIT NO. 0724-01-C
(PAGE 3 OF 5)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

Biodiesel (S15) and Wood Heat Input:

Table 5: Biodiesel and Wood Heat Input				
Month	Biodiesel Heat Input, Monthly Basis (MMBtu)	Wood Heat Input, Monthly Basis (MMBtu)	Total Biodiesel and Wood Heat Input, Monthly Basis (MMBtu)	Total Biodiesel and Wood Heat Input, Rolling 12-Mo. Basis (MMBtu)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

**MONITORING REPORT FORM: BOILER FUEL, ESP AND BAGHOUSE,
EMISSION CAPS
COVERED SOURCE PERMIT NO. 0724-01-C
(PAGE 4 OF 5)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

CO and NO_x Emissions:

Table 5: <u>CO and NO_x Emissions</u>				
Month	CO Emissions, Monthly Basis (tpy)	CO Emissions, Rolling 12-Mo. Basis (tpy)	NO_x Emissions, Monthly Basis (tpy)	NO_x Emissions, Rolling 12-Mo. Basis (tpy)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

**MONITORING REPORT FORM: BOILER FUEL, ESP AND BAGHOUSE,
EMISSION CAPS
COVERED SOURCE PERMIT NO. 0724-01-C
(PAGE 5 OF 5)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

HAPs Emissions:

Table 6: <u>HAPs Emissions</u>				
Month	Total HAPs Emissions, Monthly Basis (tpy)	Total HAPs Emissions, Rolling 12-Mo. Basis (tpy)	Largest Individual HAP Emissions, Monthly Basis (tpy)	Largest Individual HAP Emissions, Rolling 12-Mo. Basis (tpy)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

Largest Individual HAP _____

**EXCESS EMISSION AND MONITORING SYSTEM
PERFORMANCE SUMMARY REPORT
COVERED SOURCE PERMIT NO. 0724-01-C
PAGE 1 OF 2**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

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)

Company name: _____

Facility name: _____

Equipment location: _____

Equipment description: _____

Serial/ID Number: _____

Pollutant Monitored: _____

From: Date: _____ Time: _____

To: Date: _____ Time: _____

Emission Limitation: _____

Date of Last CMS Certification/Audit: _____

Total Source Operating Time: _____

EMISSION DATA SUMMARY

1. Duration (Hours) of Excess Emissions in Reporting Period due to:
 - a. Startup/Shutdown..... _____
 - b. Cleaning/Soot Blowdown..... _____
 - c. Control Equipment Failure..... _____
 - d. Process Problems..... _____
 - e. Other Known Causes..... _____
 - f. Unknown Causes..... _____
 - g. Fuel Problems..... _____Number of incidents of excess emissions..... _____
2. Total Duration of Excess Emissions..... _____
3. Total Duration of Excess Emissions..... _____
(% of Total Source Operating Time)

**EXCESS EMISSION AND MONITORING SYSTEM
PERFORMANCE SUMMARY REPORT
COVERED SOURCE PERMIT NO. 0724-01-C
(PAGE 2 OF 2)**

Issuance Date: August 31, 2011

Expiration Date: August 30, 2016

(Make Copies for Future Use)

COMS PERFORMANCE SUMMARY

1. CMS Downtime (Hours) in Reporting Period Due to:
 - a. Monitor Equipment Malfunctions..... _____
 - b. Non-Monitor Equipment Malfunctions..... _____
 - c. Quality Assurance Calibration..... _____
 - d. Other Known Causes..... _____
 - e. Unknown Causes..... _____Number of incidents of monitor downtime..... _____
2. Total CMS Downtime..... _____
3. Total CMS Downtime..... _____
(% of Total Source Operating Time)

CERTIFICATION by Responsible Official

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____