

Proposed (1/7/04)

[Issuance Date]

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

()

03-xxxE CAB
File No. 0215-04/05/06

Mr. Frank J. Doyle
Director
Department of Environmental Services
City and County of Honolulu
1000 Uluohia Street, Suite 303
Kapolei, Hawaii 96707

Dear Mr. Doyle:

**Subject: Covered Source Permit (CSP) No. 0215-01-C
Renewal Application No. 0215-04
Significant Modification Application No. 0215-05
Minor Modification Application No. 0215-06
City and County of Honolulu, Department of Environmental Services
Honouliuli Wastewater Treatment Plant
Located at: 91-1501 Geiger Road, Ewa Beach, Oahu
Date of Expiration: [Five Year Period from Issuance Date]**

The subject Covered Source Permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information submitted as part of your renewal application dated December 31, 2001, significant modification application dated December 31, 2001, and minor modification application dated July 29, 2003.

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

Attachment I: Standard Conditions
Attachment IIA: Special Conditions - Sludge Incinerator No. 1
Attachment IIB: Special Conditions - Clayton and York-Shipleigh Boilers
Attachment IIC: Special Conditions - Odor Control Systems
Attachment II - INSIG: Special Conditions - Insignificant Activities
Attachment III: Annual Fee Requirements
Attachment IV: Annual Emission Reporting Requirements
Attachment V: Compliance Certification

Proposed (1/7/04)

Mr. Frank J. Doyle
[Issuance Date]
Page 2

The forms for the submission of Monitoring Reports and Annual Emissions are as follows:

Monitoring Report Form - Boilers
Monitoring Report Form - Visible Emissions
Visible Emissions Form Requirements with the following enclosures:
 a. Visible Emissions Form
 b. The Ringelmann Chart
Excess Emission and Monitoring System Performance Summary Report Form:
 Incinerator's Opacity Monitor
Annual Emissions Report Form - Incinerator
Annual Emissions Report Form - Boilers

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

Sincerely,

Chiyome Leinaala Fukino, M.D.
Director of Health

DL:lk

Enclosures

c: CAB Enforcement Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

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

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

(Auth.: HAR §11-60.1-90)

2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be wilfully 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 Regional Administrator for the U.S. Environmental Protection Agency (EPA).

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

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

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

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health in writing of the following dates:
- 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;
 - The **actual date of construction commencement** within fifteen (15) days after such date; and
 - 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 Administrator 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:
- Identification of the specific equipment to be taken out of service, as well as its location and permit number;
 - The expected length of time that the air pollution control equipment will be out of service;
 - The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
 - Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
 - 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 each 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. A copy of applicable correspondence or records submitted to the Department of Health shall be provided to the U.S. EPA Administrator.

(Auth.: HAR §11-60.1-90)

19. 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)

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

- a. Construction shall be commenced within eighteen (18) months after the permit takes effect, shall not be discontinued for a period of eighteen (18) months or more, and shall be 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)

21. The Department of Health may extend the time periods specified in Standard Condition No. 20 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)

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

24. 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 assure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

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

27. 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)

28. 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 Regional Administrator once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

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

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

CSP No. 0215-01-C
Attachment I
Page 7 of 7
[Issuance Date]
[Expiration Date]

Proposed (1/7/04)

Upon request, 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)

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.

Proposed (1/7/04)

**ATTACHMENT IIA: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0215-01-C**

Sludge Incinerator No. 1

[Issuance Date]

[Expiration Date]

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:

- a. Sludge Incinerator No. 1 (1.6 tons/hr dry sludge)
 - i. Multiple Hearth Incinerator.
 - ii. Venturi wet scrubbing system, Impingement Tray Scrubber and Mist Eliminators for particulate emissions control.
 - iii. Unfired Waste Heat Recovery Boiler.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. A job number may be used instead of the model and serial numbers. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. The sludge incinerator no. 1 is subject to the provisions of the following federal regulations:

- a. 40 CFR Part 60, New Source Performance Standards (NSPS),
 - i. Subpart A, General Provisions; and
 - ii. Subpart O, Standards of Performance for Sewage Treatment Plants.
- b. 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS),
 - i. Subpart A, General Provisions;
 - ii. Subpart C, National Emission Standard for Beryllium; and
 - iii. Subpart E, National Emission Standard for Mercury.

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, 40 CFR §60.150, 40 CFR §61.30, 40 CFR §61.50)¹

Section C. Operational and Emissions Limitations

1. Sludge Incinerator No. 1 shall not emit particulate emissions in excess of 1.30 lb/ton dry sludge input.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.152)¹

2. Sludge Incinerator No. 1 shall not emit mercury emissions in excess of 3,200 grams per 24-hour period.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-180, 40 CFR §61.52)¹

3. Sludge Incinerator No. 1 shall not emit beryllium emissions in excess of 10 grams per 24-hour period.

(Auth.: HAR §11-60.1-3, §11-60.1-90, 40 CFR §61.32)¹

4. The sludge charging rate for Sludge Incinerator No. 1 shall not exceed 3.5 tons per hour (wet).

(Auth.: HAR §11-60.1-5, §11-60.1-90)

5. Supplemental firing of the incinerator shall be performed using diesel fuel no. 2 only, with a maximum sulfur content not to exceed 0.33% by weight.

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

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

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, §11-60.1-161, 40 CFR §60.152)¹

7. The permittee shall continuously operate the following devices for the control of particulate emissions from the incinerator:
 - a. Venturi Wet Scrubbing System,
 - b. Impingement Tray Scrubber, and
 - c. Mist Eliminators

(Auth.: HAR §11-60.1-5, §11-60.1-90)

8. The emergency bypass of the Venturi Scrubber shall only be utilized during the following two (2) conditions and time periods:
 - a. Not more than four (4) hours during incinerator startups and shutdowns when regularly scheduled maintenance of the incinerator is performed; and
 - b. Not more than five (5) hours following emergency shutdown of the incinerator during which time sludge incineration is ceased and diesel fuel no. 2 is burned at a gradually decreasing rate until total cool down is achieved.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section D. Monitoring and Recordkeeping Requirements

1. The permittee shall calibrate, maintain and continuously operate the following:
 - a. A flow measuring device to determine the mass of sludge (wet and dry basis) charged to the incinerator. This flow measuring device shall be certified by the manufacturer to have an accuracy of +/- 5% over their respective operating ranges.
 - b. Monitoring device to continuously measure and record the pressure drop of the gas flow through the wet scrubbing device. This device shall be certified by the manufacturer to be accurate within +/- 250 pascals (+/- 1 inch of water) and shall be calibrated on an **annual basis** in accordance with the manufacturer's instructions.
 - c. Monitoring device to continuously measure and record the oxygen concentration and opacity of the incinerator's exhaust gases. The opacity monitor shall be certified and maintained in accordance with the procedures in 40 CFR 60, Appendix B and Appendix F. The oxygen monitor shall be certified by the manufacturer to have a relative accuracy of +/- 5% over its operating range and shall be calibrated according to the method(s) prescribed by the manufacturer at least once **each 24-hour operating period**.
 - d. Temperature measuring devices at every hearth in the incinerator. A minimum of one thermocouple shall be installed in each hearth in the cooling and drying zone(s) and a minimum of two thermocouples shall be installed in each hearth in the combustion zone(s). Each temperature measuring device shall be certified by the manufacturer to have an accuracy of +/- 5% over its operating range.

- e. Fuel flow measuring device to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of +/- 5% over its operating range.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.153; SIP§11-60-15)^{1,2}

2. The permittee shall collect and analyze a grab sample of the sludge sent to the incinerator for dry sludge content (percent solids) and total volatile solids (percent volatiles based on dry weight) **once per day**. The dry sludge content and the volatile solids content of the sample shall be recorded as an average value **on a monthly basis**.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161, 40 CFR §60.153; SIP§11-60-15)^{1,2}

3. The permittee shall maintain records on the following:
- The total tons (wet and dry basis) of sewage sludge processed on a monthly basis;
 - The measured pressure drop of the gas flow through the wet scrubbing device;
 - The measured oxygen content of the incinerator's exhaust gas;
 - The measured temperatures of the incinerator;
 - The rate of sludge charged to the incinerator;
 - The fuel flow to the incinerator; and
 - The total solids and volatile solids content of the sludge charged to the incinerator.

____(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.153; SIP§11-60-15)^{1,2}

4. The permittee shall maintain records on the use of the emergency bypass of the Venturi Scrubber. These records shall include:
- The date and time the Venturi Scrubber was bypassed;
 - The total number of hours the Venturi Scrubber was bypassed;
 - The cause of the bypass; and
 - Schedule of necessary repairs.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

5. The permittee shall maintain records of all emission test results and other data needed to determine total beryllium and mercury emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180, 40 CFR §61.33 and §61.53; SIP§11-60-15)^{1,2}

6. The permittee shall maintain records of the sulfur content of the diesel fuel no. 2 fired in the incinerator. A contract document or other appropriate documentation specifying the fuel sulfur content with certification by the supplier or producer of the fuel supplied shall be obtained.

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

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

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

Section E. Notification and Reporting Requirements

1. The permittee shall submit **semi-annually** the following written reports to the Department of Health for monitoring purposes. The report shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), be signed and dated by a responsible official and shall include the following:
 - a. A record of average scrubber pressure drop measurements for each period of fifteen (15) minutes duration or more during which the pressure drop of each scrubber was less than, by a percentage specified below, the average scrubber pressure drop measured during the most recent compliance test. The percent reduction for which a report is required shall be determined by the following equation:

$$P = -111E + 72.15$$

Where: P= Percent reduction in pressure drop
E= Average particulate matter emissions (kg/megagram)

- b. A record of average oxygen content (as a percent of total gas flow) in the incinerator's exhaust gas for each period of one-hour duration or more that the oxygen content of the incinerator's exhaust gas (as a percent of total gas flow) exceeded the average oxygen content measured during the most recent compliance test by more than three (3) percent.

- c. **For each calendar day** in which either a. *or* b. above has occurred, the permittee shall also include the following in the report:
- i. Scrubber pressure drop averaged over each one-hour incinerator operating period.
 - ii. Oxygen content in the incinerator exhaust averaged over each one-hour incinerator operating period.
 - iii. Temperatures of every hearth averaged over each one-hour incinerator operating period.
 - iv. Rate of sludge charged to the incinerator averaged over each one-hour incinerator operating period.
 - v. Incinerator fuel use averaged over each eight-hour incinerator operating period.
 - vi. Moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.
- d. The magnitude of any opacity emissions in excess of the opacity limit set forth in Attachment IIA, Special Condition No. C.6., any conversion factors used, the date and time of commencement and completion of each time period of excess opacity emissions. The report shall so state if no excess emissions have occurred. The enclosed **Excess Emission and Monitoring System Performance Summary Report Form: Incinerator's Opacity Monitor**, shall be used.
- e. Deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR 60.7, 40 CFR §60.155; SIP§11-60-15)^{1,2}

2. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit on an **annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days after the end of each calendar year**. The enclosed **Annual Emissions Report Forms: Incinerator**, shall be used in reporting and be signed and dated by a responsible official.

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

3. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Conditions, Nos. 16, 17, and 25, respectively:
 - a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance,*
 - b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies), and*
 - c. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-16)²

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

(Auth.: HAR §11-60.1-3, §11-60.1-16, §11-60.1-90; SIP §11-60-16)²

5. The permittee shall notify the Department of Health in writing **at least thirty (30) days prior to conducting a performance test** as required in Attachment IIA, Section F.

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

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, **Attachment V: Compliance Certification**, pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;

- e. Any additional information indicating the source's compliance with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

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)

7. The permittee shall submit to the Department of Health **on a semiannual basis** a written report of all incidents of emergency bypass of the Venturi Scrubber. This report shall include all of the required recordkeeping information described in Attachment IIA, Special Condition No. D.4.

(Auth.: HAR §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP§11-60-16)²

8. The permittee shall notify the Department of Health in writing **within five (5) working days** of when Attachment IIA , Special Condition No. C.8 is exceeded.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section F. Testing Requirements

1. The permittee shall conduct a *performance test* **annually** to establish compliance with the emission limit specified in Attachment IIA, Special Condition No. C.1. for particulate matter emissions from Sludge Incinerator No. 1. Sludge and particulate sample analyses shall also be performed for arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium and zinc. The test methods and procedures are set forth below and are referenced in Appendix A of 40 CFR, Part 60:
 - a. Method 5 for concentration of particulate matter and associated moisture content;
 - b. Method 1 for sample and velocity traverse;
 - c. Method 2 for velocity and volumetric flow rate; and
 - d. Method 3 for gas analysis.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154, SIP§11-60-15)^{1,2}

2. Note that Method 1 cannot be used under the following conditions:
- Cyclonic or swirling gas flow at the sampling location;
 - Stack or duct with a diameter less than 12 inches or a cross-sectional area less than 113 square inches; or
 - Sampling location less than two stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.

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

3. The permittee shall provide sampling and testing facilities at its own expense.

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

4. For Method 5, the sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be at least (31.8) dry cubic feet at standard conditions (dscf).

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

5. Particulate emissions shall be reported in two categories:

- Front half (filter and probe); and
- 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 with acetone. Connecting glassware after the first impinger and the other impingers shall be rinsed with water. All rinses shall be included in the analysis for back half.

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

6. The emission rate of particulate matter for each run shall be computed using the following equation:

$$E = K(c_s * Q_{sd})/S$$

Where: E= Emission rate of particulate matter (lb/ton of dry sludge input)
c_s= Concentration of particulate matter (g/dscf)
Q_{sd}= Volumetric flow rate of effluent gas (dscf/hr)

S= Charging rate of dry sludge during the run (lb/hr)
 K= Conversion factor [4.409 lb²/(g-ton)]

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP§11-60-15)^{1,2}

7. The dry sludge charging rate (S) for each run shall be computed using either of the following equations:

a. $S = K_m S_m R_{dm} / \theta$
 b. $S = K_v S_v R_{dv} / \theta$

Where: S= Charging rate of dry sludge (lb/hr)
 S_m= Total mass of sludge charged (lb)
 R_{dm}= Average mass of dry sludge per unit mass of sludge charged (lb/lb)
 θ= Duration of test run (min)
 K_m= Conversion factor (60 min/hr)
 S_v= Total volume of sludge charged (gal)
 R_{dv}= Average mass of dry sludge per unit volume of sludge charged (lb/ft³)
 K_v= Conversion factor [8.021 (ft³-min)/(gal-hr)]

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP§11-60-15)^{1,2}

8. The flow measuring device of Attachment IIA, Special Condition No. D.1.a. shall be used to determine the total mass (S_m) or volume (S_v) of sludge charged to the incinerator during each run. If the flow measuring device is on a time rate basis, readings shall be taken and recorded at five-minute intervals during the run and the total charge of sludge shall be computed using the following equations as applicable:

a. $S_m = \sum_{i=1}^n Q_{mi} \theta_i$

b. $S_v = \sum_{i=1}^n Q_{vi} \theta_i$

Where: Q_{mi}= Average mass flow rate calculated by averaging the flow rates at the beginning and end of each interval "i" (lb/min)
 Q_{vi}= Average volume flow rate calculated by averaging the flow rates at the beginning and end of each interval "i" (gal/min)
 θ_i= Duration of interval "i" (min)

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP §11-60-15)^{1,2}

9. Samples of sludge charged to the incinerator shall be collected in nonporous jars at the beginning of each run and at approximately one-hour intervals thereafter until the test ends. Method 209F, "Method for Solid and Semi-solid Samples" (incorporated by reference -- see 40 CFR §60.17) shall be used to determine the dry sludge content of each sample (total solids residue) except that:
- Evaporating dishes shall be ignited to at least 103°C rather than the 550°C specified in step 3(a)(1).
 - Determination of volatile residue, step 3(b) may be deleted.
 - The quantity of dry sludge per unit sludge charged shall be determined in terms of lb/ft³ or lb/lb.
 - The average dry sludge content shall be the arithmetic average of all samples taken during the run.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP §11-60-15)^{1,2}

10. For each run at a minimum, the particulate emission rate in pounds per hour, pounds per ton of dry sludge input and the sludge feed rate in tons per hour shall be provided. The permittee shall document the methodology by which each particulate emission rate was determined.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP §11-60-15)^{1,2}

11. The permittee shall also conduct a *performance test* **annually** on Sludge Incinerator No. 1 to determine mass rate of discharge of both mercury and beryllium from the sludge incinerator.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180, 40 CFR §61.33 , §61.53, §61.54 and §61.55; SIP§11-60-15)^{1,2}

12. Beryllium emissions testing shall be performed according to 40 CFR 61, Appendix B, Method 104. 40 CFR 61, Appendix B, Method 103 may be used as an alternate method subject to approval of the Department of Health. Request for the use of this alternate method must be submitted in the **Source Test Plan** required in Attachment IIA, Special Condition No. F.21.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §61.33; SIP§11-60-15)^{1,2}

13. Mercury emissions testing shall be performed according to 40 CFR 61, Appendix B, Method 101A. Under 40 CFR §61.53(d), Method 105 of 40 CFR 61, Appendix B may be used as an alternate method for determining mercury emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180, 40 CFR §61.53 and §61.54; SIP§11-60-15)^{1,2}

14. If 40 CFR 61, Appendix B, Method 105 (sludge sampling) is to be used as an alternate means of showing annual compliance with the mercury emission standard, the following procedures must also be followed:

- a. The sludge shall be sampled according to 40 CFR 61, Appendix B, Method 105, "Determination of Mercury in Wastewater Treatment Plant Sewage Sludges". A total of three composite samples shall be obtained within an operating period of 24 hours. When the 24-hour operating period is not continuous, the total sampling period shall not exceed 72 hours after the first grab sample is obtained. Samples shall not be exposed to any condition that may result in mercury contamination or loss.
- b. The maximum 24-hour period sludge incineration rate shall be determined by use of a flow measurement device that can measure the mass rate of sludge charged to the incinerator with an accuracy of +/- 5 percent over its operating range.
- c. The sampling, handling, preparation and analysis of sludge samples shall be accomplished according to 40 CFR 61, Appendix B, Method 105.
- d. The mercury emissions shall be determined by use of the following equation:

$$E_{\text{Hg}} = \frac{M * Q * F_{\text{sm(avg)}}}{1000}$$

Where: E_{Hg} = Mercury emissions (g/day)
 M = Mercury concentration of sludge on a dry solids basis ($\mu\text{g/g}$)
 Q = Sludge charging rate (kg/day)
 F_{sm} = Weight fraction of solids in the collected sludge after mixing
 1000 = Conversion factor ($\text{kg-}\mu\text{g/g}^2$)

- e. All sludge samples shall be analyzed for mercury content **within thirty (30) days after the sludge sample is collected**. Each determination shall be reported to the U.S. EPA and the Department of Health by registered letter dispatched within **fifteen (15) calendar days following such a determination**.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180, 40 CFR §61.53 and §61.54; SIP §11-60-15)^{1,2}

15. The following procedures shall be followed for both beryllium and mercury emissions testing:
 - a. Samples shall be taken over such a period or periods as are necessary to determine the maximum emissions which occur in any 24-hour period. Where emissions depend upon the relative frequency of operation of different types of processes, operating hours, operating capacities or other factors, the calculation of maximum 24-hour

emissions shall be based on that combination of factors which is most likely to occur during the subject period and which will result in maximum emissions. No changes in the operation shall be made which would potentially increase emissions above that determined by the most recent source test until a new emission level has been estimated by calculation and the results reported to the Department of Health.

- b. All samples shall be analyzed and beryllium and mercury emissions shall be determined **within thirty (30) days after the source test**. For beryllium testing, all determinations shall be reported to the U.S. EPA and the Department of Health by registered letter dispatched before the close of the next business day following such a determination. For mercury testing, all determinations shall be reported to the U.S. EPA and the Department of Health by registered letter dispatched within **fifteen (15) calendar days following such a determination**.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180, 40 CFR §61.33 and §61.53; SIP§11-60-15)^{1,2}

16. For each run, the mercury emissions in grams per 24-hour period shall be provided. The permittee shall document the methodology by which each mercury emission rate was determined.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-180, 40 CFR §61.53 and §61.54; SIP§11-60-15)^{1,2}

17. For each run, the beryllium emissions in grams per 24-hour period shall be provided. The permittee shall document the methodology by which each beryllium emission rate was determined.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §61.32 and §61.33; SIP §11-60-15)^{1,2}

18. The particulate, mercury and beryllium emission source tests shall be made at the expense of the permittee and shall be conducted at the maximum expected operating capacity of the source.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, §11-60.1-180, 40 CFR §60.8 and §60.154, 40 CFR §61.53 and §61.54; SIP§11-60-15)^{1,2}

19. Compliance with the opacity standard in Attachment IIA, Special Condition No. C.6. shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60 or by submitting continuous opacity monitoring system (COMS) data results produced during the performance testing. If the permittee elects to submit

COMS data in lieu of Method 9 observation data, the Department of Health must be notified of this decision, in writing, at least **thirty (30) days prior to any performance testing**.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP §11-60-15, §11-60-24)^{1,2}

20. Each performance test shall consist of three (3) separate runs using the applicable test method(s). 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, 40 CFR §60.8; SIP §11-60-15)^{1,2}

21. **At least thirty (30) days prior to performing a performance test**, the permittee shall submit a **Source Test Plan** to the Department of Health that describes the test dates and duration, test locations, test methods, source operation and other parameters that may affect 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, §11-60.1-161, 40 CFR §60.8 and §60.154, 40 CFR §61.53; SIP §11-60-15)^{1,2}

22. 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 §11-60.1-5, §11-60.1-11, §11-60.1-90; SIP §11-60-15)^{1,2}

23. The permittee shall conduct all performance tests during which the monitoring and recording devices required in Attachment IIA, Special Condition No. D.1 are installed and operating and for which the sampling and analysis procedures required in Attachment IIA, Special Condition No. D.2 are performed.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.154; SIP §11-60-15)^{1,2}

24. **Within sixty (60) days after completion of the performance test**, the permittee shall submit to the Department of Health and U.S. EPA the test report which shall include all test data and results, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

25. The Department of Health may waive a specific performance test upon written request by the permittee. Such a request would need to be justified on the grounds that prior tests had shown compliance by a wide margin, and that adequate means exist to show continuing compliance.

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

Section G. Agency Notifications

1. Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Conditions, No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

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

**ATTACHMENT IIB: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0215-01-C**

Clayton and York-Shipley Boilers

[Issuance Date]

[Expiration Date]

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:

- a. Clayton Boiler

- i. 6 MMBtu/hr heat input
- ii. 150 Horsepower

- b. York-Shipley Boiler

- i. 8 MMBtu/hr heat input
- ii. 200 Horsepower

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each boiler which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the boiler in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emissions Limitations

1. The Clayton and York-Shipley boilers shall be fired only on diesel fuel no. 2 with a maximum sulfur content not to exceed 0.33% by weight.

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

2. The total combined fuel usage for the Clayton and York-Shipley boilers shall not exceed 876,000 gallons per any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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

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

Section C. Monitoring and Recordkeeping Requirements

1. The permittee shall maintain a non-resetting volumetric fuel meter(s) to record the amount of fuel burned in the two steam boilers.

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

2. The permittee shall maintain records of the total fuel consumed in each boiler on a monthly basis and the total combined fuel usage from both boilers on a rolling twelve (12) month basis. Records shall also be kept showing the type of fuel being fired by the two boilers and the fuel sulfur content (percent by weight). A contract document or other appropriate documentation specifying the fuel sulfur content with certification by the supplier or producer of the fuel supplied shall be obtained and kept on file.

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

3. Visible Emissions (V.E.)

- a. Except in those months where V.E. observations are conducted by a certified reader for the annual observation of the boilers, the permittee shall conduct **monthly** (*calendar month*), V.E. observations of the boilers in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

- b. The permittee shall conduct **annually** (calendar year), V.E. observations for the boilers by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For the annual observation, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

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

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

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

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

Section D. Notification and Reporting Requirements

1. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit on an **annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days after the end of each calendar year**. The enclosed **Annual Emissions Report Forms: Boilers**, shall be used in reporting and be signed and dated by a responsible official.

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16, 17 and 25, respectively:
 - a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance,*

- b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies), and*
- c. *Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-16)²

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

(Auth.: HAR §11-60.1-3, §11-60.1-16, §11-60.1-90; SIP§11-60-16)²

4. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, **Attachment V: Compliance Certification**, pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

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

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

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

5. The permittee shall submit **semi-annually** the following written reports to the Department of Health for monitoring purposes. The report shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), be signed and dated by a responsible official and shall include the following:
- a. Records of the total fuel consumption for each boiler on a monthly basis and also the total combined fuel consumption for both boilers on a rolling twelve (12) month basis. Include the type and the maximum sulfur content (percent by weight) of the fuel fired. The enclosed **Monitoring Report Form: Boilers** shall be used for reporting.
 - b. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that there were no exceedances for that semi-annual period. The enclosed **Monitoring Report Form: Visible Emissions** shall be used for reporting.
 - c. Deviations from permit requirements shall be clearly identified.

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

Section E. Testing Requirements

1. Although a stack test is not required at this time, the Department of Health reserves the right to require, at any time, a stack test to be performed for these sources.

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

Section F. Agency Notifications

1. Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Conditions, No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

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

**ATTACHMENT IIC: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0215-01-C**

Odor Control Systems

[Issuance Date]

[Expiration Date]

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:
 - a. Central Odor Control System
 - i. Comprised of two (2) caustic scrubbing towers followed by five (5) dual-bed activated carbon towers. Only one scrubber is operated at a time. The nonoperating scrubber will be on standby and/or will be undergoing maintenance.
 - ii. Receives foul air from the following:
 - (1) Grit/Preaeration Tanks
 - (2) Primary Clarifiers
 - (3) Gravity Thickeners
 - (4) Blend Tanks
 - b. Headworks Odor Control System
 - i. Comprised of two (2) activated carbon towers (one dual bed and one single bed).
 - ii. Receives foul air from the following:
 - (1) Influent Sewer
 - (2) Bar Screens
 - c. Solids Odor Control System
 - i. Consists of one (1) wet scrubber using brackish, potable or reclaimed water (no chemical addition) followed by two (2) activated carbon towers. Foul air is then routed for further treatment by burning in either the sludge incinerator or the York-Shipley boiler. There is also an atmospheric bypass stack to be used when bypassing the activated carbon towers and/or the sludge incinerator and boiler.
 - ii. Receives foul air from the following:
 - (1) Decant Tanks
 - (2) Scum Collection Box
 - (3) Centrifuges
 - (4) Carbon condensate washdown holding tank

- d. Secondary Odor Control System
 - i. Consists of two (2) catalytic scrubbing towers followed by five (5) single-bed activated carbon vessels.
 - ii. Receives foul air from the following:
 - (1) Solids Contactors
 - (2) Solids Reaeration Tanks
 - (3) Biotowers
 - (4) Biotower Pump Station

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emissions Limitations

1. The Central, Headworks, Solids and Secondary Odor Control Systems shall be properly maintained and operated continuously, except for periods when these control systems must be taken out of service for scheduled maintenance or repair.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

2. Only one of the odor control systems (i.e., Central, Headworks, Solids or Secondary Systems) may be taken out of service for scheduled maintenance or repair at a time. If two odor control systems require maintenance at the same time, the permittee shall receive prior approval from the Department of Health. The permittee shall provide written justification on the reasons why this maintenance cannot be scheduled at separate times. The permittee shall submit this request at least **five (5) days** prior to the planned shutdown.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. The Central Odor Control System may be operated in a bypass mode (bypassing the activated carbon towers) in the event of an emergency, scheduled maintenance or repair. Scrubbers may be alternated in use, as long as only one scrubber is in operation at a time.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

4. The Solids Odor Control System may be operated in the following bypass modes in the event of scheduled maintenance or repair:
 - a. If both the sludge incinerator and York-Shiplely boiler are not operating, the foul air shall be routed through the wet scrubber, activated carbon towers and atmospheric bypass stack;
 - b. If the activated carbon towers are not operating, the foul air shall be routed through the wet scrubber and either the sludge incinerator or York-Shiplely boiler;
 - c. If the activated carbon towers and both the sludge incinerator and York-Shiplely boiler are not operating, the foul air shall be routed through the wet scrubber and atmospheric bypass stack.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

5. The H₂S emission concentrations from the outlets of the activated carbon towers of the following odor control systems shall not be exceeded:
 - a. 2.0 parts per million by volume(ppmv) for the Central Odor Control System;
 - b. 3.0 parts per million by volume (ppmv) for the Headworks Odor Control System; and
 - c. 1.0 part per million by volume (ppmv) for the Secondary Odor Control System.

The carbon in the vessel(s) shall be regenerated or replaced before reaching these action levels.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

6. The H₂S concentration at all property lines of the Honouliuli facility shall not exceed 25 parts per billion by volume (ppbv) or 35 micrograms per cubic meter (µg/m³) in any one-hour period.

(Auth.: HAR §11-59-4, §11-59-5, §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. The H₂S emission concentrations from the outlet of each of the activated carbon towers shall be monitored on a **weekly** basis to ensure the action levels in Attachment IIC, Special Condition No. B.5 are not exceeded. If the Department of Health determines that an off-property H₂S odor problem exists, the Department of Health reserves the right to increase this monitoring to **daily**. These weekly or daily records shall be maintained and include, at a minimum, the following:
 - a. Method used to determine the H₂S concentration (i.e., H₂S meter or analysis of a carbon sample from the vessel),
 - b. Date of emission concentration reading or result,
 - c. H₂S emission concentration in ppmv,

- d. Documentation of any replacement or regeneration of carbon in the vessel(s), and
- e. Identification of the activated carbon adsorption vessel(s) having its carbon regenerated or replaced.

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

2. The H₂S emission concentration at all property lines of the Honouliuli facility shall be monitored on a **weekly** basis to ensure the 25 ppbv per one-hour period concentration limit is not exceeded. If the Department of Health determines that an off-property H₂S odor problem exists, the Department of Health reserves the right to increase this monitoring to **daily**. These weekly or daily records shall be maintained and include, at a minimum, the following:
 - a. Method used to determine the H₂S concentration,
 - b. Date of emission concentration reading or result,
 - c. H₂S emission concentration in ppbv, and
 - d. Location(s) and number of readings performed.

The permittee shall maintain at the facility the monitoring plan to monitor the property lines for H₂S and compliance with Special Condition No. B.6 of this Attachment.

(Auth.: HAR §11-59-4, §11-59-5, §11-60.1-5, §11-60.1-90; SIP §11-60-15)²

3. Although continuous emissions monitoring and/or ambient monitoring is not required at this time, if an off-property H₂S odor problem persists, the Department of Health reserves the right to, at any time, require such monitoring to be performed by the permittee.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

4. The permittee shall maintain records for all times that the odor control systems are not functioning. This includes periods of malfunction as well as maintenance and repair, and periods in which the odor control systems are operating in the bypass modes. Records shall also be kept to ensure that only one system is taken out of service at a time for scheduled maintenance.

(Auth.: HAR §11-60.1-5, §11-60.1-15, §11-60.1-16, §11-60.1-90)

5. Central and Secondary Odor Control System

- a. The permittee shall perform, at a minimum, the following monitoring and analysis for each catalytic scrubbing tower of the Secondary Odor Control System, when chemicals are used in the scrubbers. The permittee shall follow the manufacturer's instructions for when and how to use the chemicals. The permittee shall take daily measurements of H₂S entering the scrubbers in order to determine if chemical use is needed.

- i. **Daily** check of scrubber solution pH,
 - ii. **Daily** check of reduction and oxidation (redox) potential,
 - iii. **Monthly** bacteria count, and
 - iv. **Monthly** chelate balance check.
- b. The permittee shall perform, at a minimum, the following monitoring and analysis for the Central Odor Control System's caustic scrubbing tower:
 - i. **Daily** check for pH.
- c. For the Secondary Odor Control System, the pH balance, redox potential, bacteria count and chelate balance shall be maintained in accordance with the manufacturer's requirements.
- d. For the Central Odor Control System, the pH balance shall be maintained in accordance with the manufacturer's requirement.
- e. The Department of Health reserves the right to require additional or more frequent testing at any time.
- f. All records shall be maintained on site in a format suitable for Department of Health inspection and must include the date of the monitoring and analyses.

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

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

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

Section D. Notification and Reporting Requirements

1. The Department of Health shall be notified in writing **at least twenty-four (24) hours prior to the planned shutdown of any of the odor control systems** for scheduled maintenance and/or repair. Notification shall be in accordance with Attachment I, Standard Conditions, No. 16.

(Auth.: HAR §11-60.1-15; SIP11-60-16)²

2. The permittee shall **immediately** notify the Department of Health of any operational upsets, equipment failure or malfunctions that would result in the uncontrolled release of H₂S. Notification shall be in accordance with Attachment I, Standard Conditions, No. 17.

(Auth.: HAR §11-60.1-16; SIP11-60-16)²

3. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16, 17 and 25, respectively:

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

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-16)²

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

(Auth.: HAR §11-60.1-3, §11-60.1-16, §11-60.1-90; SIP§11-60-16)²

5. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, **Attachment V: Compliance Certification**, pursuant to HAR, §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;

- e. Any additional information indicating the source's compliance with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

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)

Section E. Testing Requirements

1. Although a stack test is not required at this time, the Department of Health reserves the right to require, at any time, a stack test to be performed for these sources.

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

Section F. Agency Notifications

1. Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Conditions, No. 29.

(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
COVERED SOURCE PERMIT NO. 0215-01-C**

Insignificant Activities

[Issuance Date]

[Expiration Date]

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

Section A. Equipment Description.

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

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

Section D. Notification and Reporting

1. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, Attachment V: Compliance Certification 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 be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include at a minimum the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period; and
- e. Any additional information as required by the Department of Health including information to determine compliance.

In lieu of addressing each emission unit as specified in Attachment V, 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.

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)

Section E. Agency Notification

1. Any document (including reports) required to be submitted by this Covered Source Permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

Proposed (1/7/04)

**ATTACHMENT III: ANNUAL FEES
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

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

1. Annual fees shall be paid in full:
 - a. **Within sixty (60) days after** *the end of each calendar year*, and
 - b. **Within thirty (30) days after** *the permanent discontinuance of the covered source*.
2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1 Subchapter 6.
3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the State of Hawaii Department of Health.
4. The annual fees and the emission data shall be mailed to:

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

Proposed (1/7/04)

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

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

1. Complete the attached Annual Emissions Report Forms for the following:
 - a. Sludge Incinerator No. 1
 - b. Clayton and York Shipley Boilers
2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the State of Hawaii 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
State of Hawaii Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378**

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the State of Hawaii Department of Health upon request.
4. Any information submitted to the State of Hawaii 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 by submitting a written request to the Director of Health and clearly identifying the specific information that is to be accorded confidential treatment.

ATTACHMENT V: COMPLIANCE CERTIFICATION
COVERED SOURCE PERMIT NO. 0215-01-C

[Issuance Date]

[Expiration Date]

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

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

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

1. Current permit number: _____

2. Emissions Unit No./Description: _____

3. Identify the applicable requirement(s), and/or permit term(s) or condition(s) that is/are the basis of this certification:

4. Compliance status during the reporting period:

a. Has the emissions unit been in compliance with the identified applicable requirement(s) and/or permit term(s) or condition(s)?

YES NO

b. If YES, was compliance continuous or intermittent?

Continuous Intermittent

c. If NO, explain.

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

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

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

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

- YES NO

b. If YES, identify those requirements:

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

**MONITORING REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following on a semiannual basis:

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Month	Monthly Fuel Consumption Clayton Boiler (gallons)	Monthly Fuel Consumption York Shipley Boiler (gallons)	Monthly Total Combined Fuel Consumption Both Boilers (gallons)	Rolling 12-Month Period -Total Combined Fuel Consumption Both Boilers (gallons)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

Type of Fuel Fired _____

Maximum Sulfur Content (percent by weight) _____

**ANNUAL EMISSIONS REPORT FORM
INCINERATOR
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

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

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Classification of incinerator (circle one):

pet crematory crematory medical municipal Other (specify): _____

Type of waste incinerated (circle one): 1 2 3 4 5 6 7 8

Maximum rated capacity (pounds/hour): _____

Maximum waste per charge (pounds): _____

Type of Fuel Fired	Fuel Usage Gallons/Cubic feet per year	% Sulfur Content by weight	Tons/pounds of waste incinerated

- Types of Fuel: 1. Distillate Oil (No. 2);
2. Liquefied Petroleum Gas, Butane or Propane; and
3. If Other, specify.

Type of Air Pollution Control	In Use?	Pollutant Controlled	Control Efficiency, % reduction
_____	_____	_____	_____

Yes or No

Yes or No

**ANNUAL EMISSIONS REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

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

Fill out a separate form for each Boiler.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Serial/ID No.: _____

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

Classification of Boiler by Heat Input (Check one):

- _____ Utility: > 106 x 10⁹ J/hr. (> 100 x 10⁶ BTU/hr.)
 Tangentially-fired *Vertical-fired* *Other*
- _____ Industrial: 10.6 x 10⁹ to 106 x 10⁹ J/hr. (10 x 10⁶ to 100 x 10⁶ BTU/hr.)
- _____ Commercial: 0.5 x 10⁹ to 10.6 x 10⁹ J/hr. (0.5 x 10⁶ to 10 x 10⁶ BTU/hr.)
- _____ Residential: < 0.5 x 10⁹ J/hr. (<0.5 x 10⁶ BTU/hr.)

Type of Fuel Fired	Fuel Usage Gallons per year	% Sulfur Content by weight	Identify % Nitrogen, % Ash & % Lead, if applicable

- Types of Fuel:
- Residual Oil: Specify Grade, No. 6, 5, or 4;
 - Distillate Oil (No. 2);
 - Fuel Oil Reclaimed or Spec Used Oil;
 - Liquefied Petroleum Gas, Butane or Propane;
 - Bagasse in tons/yr;
 - If Other, specify.

Type of Air Pollution Control	In Use?	Pollutant Controlled	Control Efficiency, % Reduction
-------------------------------	---------	-------------------------	------------------------------------

Yes or No

Yes or No

EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT FORM: INCINERATOR'S OPACITY MONITOR

(Make Copies for Future Use)

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

Covered Source Permit No.: _____ Condition No.: _____

PSD Permit No.: _____ Condition No.: _____

Code of Federal Regulations (CFR): _____

Pollutant Monitored: _____

From: Date _____ - Time _____

To: Date _____ - Time _____

Emission Limit: _____

Date of Last CEMS Certification/Audit _____

Total Source Operating Time _____

EMISSION DATA SUMMARY

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

Number of incidents of excess emissions _____

2. Total Duration of Excess Emissions _____

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

CEMS PERFORMANCE SUMMARY

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

Number of incidents of monitor downtime. _____

**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT FORM: INCINERATOR'S OPACITY MONITOR**

(PAGE 2 OF 2)

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

CERTIFICATION by Responsible Official

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

NAME (Print/Type): _____

Title: _____

(Signature): _____

VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0215-01-C

[Issuance Date]

[Expiration Date]

The following Visible Emissions (V.E.) Form shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observations shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. Form shall be completed as follows:

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

The permittee shall retain the completed V.E. Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health, or their representative upon request.

Any required initial and annual performance test performed in accordance with Method 9 by a certified reader, shall satisfy the respective V.E. monitoring requirements for the month the performance test is performed.

**VISIBLE EMISSIONS FORM
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0215-01-C**

[Issuance Date]

[Expiration Date]

(Make Copies for Future Use For Each Equipment)

Permit No.: 0215-01-C

Company Name: _____

Equipment and Fuel: _____

Site Conditions:

Stack height above ground (ft): _____

Stack distance from observer (ft): _____

Emission color (black or white): _____

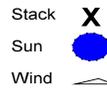
Sky conditions (% cloud cover): _____

Wind speed (mph): _____

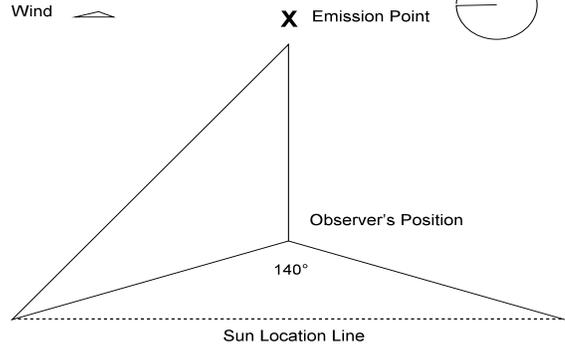
Temperature (°F): _____

Observer Name: _____

Certified? (Yes/No): _____



Draw North Arrow



Observation Date and Start Time: _____

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

Observation Date and Start Time: _____

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