

DATE

CERTIFIED MAIL
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(xxx)

08-E CAB
File No. 0214-01

Mr. Hans R. Tobler
General Manager
Kalaeloa Partners, L.P.
91-111 Kalaeloa Boulevard
Kapolei, Hawaii 96707

Dear Mr. Tobler:

**Subject: Renewal of Covered Source Permit (CSP) No. 0214-01-C
Renewal Application No. 0214-06
Kalaeloa Partners, L.P.
Kalaeloa Cogeneration Plant
Located at: 99-111 Kalaeloa Boulevard, Kapolei, Oahu
Expiration Date: [five years from DATE]**

The subject Covered Source Permit renewal is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit renewal is based on the plans, specifications, and information submitted as part of your May 1, 2007 renewal application. This covered source permit supersedes CSP No. 0214-01-C issued on May 8, 2003, and subsequent amendment dated March 1, 2004. A receipt for the application filing fee of \$3,000 was mailed on May 7, 2007.

The Covered Source Permit is issued subject to the conditions/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 Fees
Attachment IV	Annual Emissions Reporting Requirements

Mr. Hans R. Tobler
Date
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The forms for submission are as follows:

Compliance Certification forms
Monitoring Report Form(s) Fuel Certification and Consumption
 Opacity Exceedances
 Used Oil Consumption
Annual Emissions Report Form(s) Fuel Consumption

Visible Emissions Observation Form Requirements with the following enclosures:

- a. Visible Emissions Form Requirements, State of Hawaii
- b. Visible Emissions Form State of Hawaii.
- c. The Ringlemann Chart

Excess Emissions 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,

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

KK:nn
Enclosure

c: CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0214-01-C**

Issuance Date:

Expiration Date:

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

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

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

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

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

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

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

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

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

- a. The **anticipated date of initial start-up** for each emission unit of a new source or

significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

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

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

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

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

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

(Auth.: HAR §11-60.1-93)

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

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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

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

**ATTACHMENT II: SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0214-01-C**

Issuance Date:

Expiration Date:

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

Section A. Equipment Description

1. This permit encompasses the following significant equipment and associated appurtenances:

<u>Unit No.</u> <i>(for purposes of this permit)</i>	<u>Equipment Description</u>
CT1	Combustion Turbine with evaporative cooling module, max production rated at 86 MW at 76°F, manufactured by ABB, type GT11N with GT 11NM upgrade, typical fuel LSFO, diesel during start-up and shutdown.
CT2	Combustion Turbine with evaporative cooling module, max production rated at 86 MW at 76°F, manufactured by ABB, type GT 11N with GT 11 NM upgrade, typical fuel LSFO, diesel during start-up and shutdown.
HRSG1	Heat Recovery Steam Generator (HRSG), manufactured by Deltak with a condensate preheater installed in the stack breach (duct) of HRSG1, uses exhaust heat from CT1.
HRSG2	Heat Recovery Steam Generator (HRSG), manufactured by Deltak with a condensate preheater installed in the stack breach (duct) of HRSG2, uses exhaust heat from CT2.
STG1	Steam Turbine Generator, 51.5 MW, manufactured by ABB, type KT, uses steam from heat recovery boilers HRSG1 and HRSG2.
C1	Cooling Tower, 4-cell, mechanical forced draft, maximum design cooling capacity 383 million BTU per hour. Maximum water flow per cell of 523,530 gallons per hour.

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed in Section A.1. to show model no., serial no. and manufacturer. The identification tag or name plate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. Combustion Turbines CT1 and CT2 are subject to the provisions of the following federal regulations:
 - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
 - b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart GG, Standards of Performance for Stationary Gas Turbines.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR 60.1, 60.330)¹

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

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

Section C. Operational and Emission Limitations

1. Combustion Turbines, Unit Nos. CT1 and CT2.
 - a. "Start-up" and "Shut-down."
 - i. "Start-up" is defined as and shall not exceed the two (2) hour period beginning with the initiation of fuel consumption by the combustor of the combustion turbine.
 - ii. "Shut-down" is defined as and shall not exceed the one (1) hour period prior to the termination of fuel consumption by the combustion turbine.
 - b. Air Pollution Control Equipment.

Kalaelo Partners, L.P. (hereinafter, "permittee") shall continuously operate and maintain the following air pollution controls to meet the emission limits specified in Table 1 and Table 2 of Section C.1.e (Maximum Emission Limits) of this permit, except during start-up and shut-down.

- i. Combustor steam injection shall occur at a minimum steam-to-fuel mass ratio of 1.3 to 1.0 on each of the two combustion turbines to control NO_x emissions. NO_x emissions from each exhaust stack shall not exceed 130 ppmv at 15 percent O₂ (dry, 3-hour rolling average) and 483 pounds per hour from each of the two exhaust stacks as referenced in Tables 1 and 2 of Section C.1.d. Combustor steam injection shall be at the minimum steam-to-fuel ratio within two (2) hours of commencing "start-up" and shall continue until initiation of "shut-down" of each combustion turbine.

- ii. The use of alternative control system(s) other than those specified above is contingent upon receiving the Department of Health's written approval to use such a system(s) and shall not relieve the permittee from the responsibility to meet all emissions limitations contained within this Covered Source Permit.
- c. Fuel Use and Specification.
- i. The two combustion turbines shall be fired using only No. 6 low sulfur fuel oil (LSFO), No. 2 (diesel) fuel or specification used oil with a maximum sulfur content not to exceed 0.5 percent by weight. The sulfur content of the fuel oil shall be measured in accordance with the most current American Society for Testing and Materials (ASTM) method. The fuel sulfur content shall be verified by either:
 - A) Sampling and analyzing each batch of fuel for its sulfur content, or
 - B) Obtaining a certificate of analysis on the sulfur content from the supplier for each batch of fuel oil received.
 - ii. The total annual fuel consumption of LSFO, Diesel and Specification Used Oil shall not exceed 2,541,600 barrels per year (106,747,200 gallons per year) as calculated on a rolling twelve (12) month basis.
 - iii. The total amount of specification used oil fired in the combustion turbines shall not exceed 2,000 gallons as calculated on a rolling twelve (12) month basis.
 - iv. The maximum fuel heat input for each combustion turbine shall not exceed 900 MMBTU/hr based on the fuel's lower heating value (LLHV). The fuel heating value shall be determined in accordance with the most current ASTM method.
- d. Combustion of Specification Used Oil.
- i. The permit conditions prescribed herein may be revised at any time by the Department of Health to reflect federal or state promulgated rules on specification (spec) used oil.
 - ii. This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing and burning of specification used oil in the combustion turbines.
 - iii. The specification used oil shall consist only of used oil generated by Kalaeloa Partners, L.P. Specification used oil may be obtained from other sources, provided a written notification identifying the new source is submitted to the Department of Health, and approved, prior to the acceptance of the spec used oil. An analysis must accompany the delivery of each batch of spec used oil.

- iv. Samples of the used oil generated from within Kalaeloa Partners, L.P. shall be analyzed for compliance with the limits in Attachment II, Special Condition No. C.1.d.vi. prior to being burned. These samples shall be taken in such a manner that the composite sample is representative of all the used oil in that batch. Each composite sample shall be submitted in a timely manner to a qualified laboratory and analyses obtained for the constituents/properties which limits are given in Special Condition No. C.1.d.vi.

Additional used oil may be added to the batch provided that:

- A) The used oil in the specification used oil tank is retested after the addition of untested used oil; or
 - B) The holding tanks or drums of untested used oil are tested prior to addition to the specification used oil tank, and the results are verified to meet the requirements of Attachment II, Special Condition No. C.1.d.vi.
- v. In no case shall any used oil that has not been tested and verified (by laboratory analysis or as specified in Attachment II, Special Condition No. C.1.d.vi.) to meet the specification used oil requirements of Attachment II, Special Condition No. C.1.d.vi. be added to the blend tank and burned.
 - vi. The following constituents/properties of the specification used oil shall not exceed the specified limits listed below:

Constituent/Property	Allowable Limit
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogen	1,000 ppm maximum
Sulfur	0.5% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	< 2 ppm

- vii. Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Attachment II, Special Condition No. C.1.d.vi. is allowable only for used oil that were not deemed hazardous.
- viii. If fuel blending is used, the permittee shall retest or perform calculations to verify that the blended fuel meets the specification used oil limits in Special Condition No. C.1.d.vi. Blended fuel oil meeting Special Condition No. C.1.d.vi. is considered specification used oil and requires additional blending with fuel oil no. 2.

ix. This permit does not authorize the permittee to burn hazardous waste or off-specification used oil. The permittee shall not accept or burn used oil that has been declared or determined to be hazardous waste and shall not burn off-specification used oil.

e. Maximum Emission Limits.

i. Following start-up and prior to shut-down of each of the two LSFO fired combustion turbines, the permittee shall not discharge or cause to be discharged into the atmosphere from each of the two exhaust stacks sulfur dioxide (SO₂), nitrogen oxides (NO_x as NO₂), carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter (PM) in excess of the following specified limits as a function of generator load:

Table 1: Emission Limits at Specified Generator Loads¹ (3-hour rolling average)

Compounds	≤ 60%	>60%-80%	> 80%
Sulfur Dioxide (ppmvd)	98	98	98
Nitrogen Oxides (ppmvd) as NO ₂	130	130	130
Carbon Monoxide (ppmvd)	30	25	14
Volatile Organic Compounds (ppmvd) as C ₃ H ₈	2	2	1
Particulate Matter (grains/dscf)	0.026	0.021	0.018

¹15 Percent O₂, Standard Conditions (68 °F, 29.92 in. Hg)

Table 2: Emission Limits at Specified Generator Loads (3-hour rolling average)

Compounds	≤ 60%	>60%-80%	> 80%
Sulfur Dioxide (lb/hr)	488	488	488
Nitrogen Oxides (lb/hr) as NO ₂	483	483	483
Carbon Monoxide (lb/hr)	40	35	30
Volatile Organic Compounds (lb/hr) as C ₃ H ₈	3.6	3.6	3.6
Particulate Matter (lb/hr)	80	80	80

f. Visible Emissions.

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

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-33, §11-60.1-90, §11-60.1-161)

Section D. Monitoring and Recordkeeping Requirements

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

1. Combustion Turbine Generators, CT1 and CT2.
 - a. The permittee shall operate and maintain a continuous monitoring system to monitor and record the ratio of steam-to-fuel being fired in each combustion turbine.
 - b. The permittee shall operate and maintain a continuous monitoring system to monitor and record the total amount of fuel oil fired in each turbine. In addition, records on the sulfur content, density, and heating value shall be maintained for each batch of fuel oil fired in the two (2) combustion turbines. Copies of the analysis or other information used in the determination of the fuel oil sulfur content, density, and heating value shall also be included. The permittee shall also calculate and determine the SO₂ emissions from each of the two exhaust stacks in ppmvd at 15 percent O₂ and pounds per hour on an hourly or more frequent basis.
 - c. The permittee shall operate and maintain a continuous monitoring system to record the operating load for each of the two (2) combustion turbines.
 - d. The permittee shall operate and maintain a continuous emissions monitoring system (CEMS) to measure and record the NO_x, CO, and CO₂ or O₂ concentrations in the fuel gas. If a CEMS using CO₂ as a diluent is used, 40 CFR 60, Appendix A, Method 20 Equations 20-2 and 20-5 shall be used. The system shall meet EPA performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B and 40 CFR 60, Appendix F). The emission rates for NO_x and CO shall be recorded in ppmvd at 15 percent O₂ and pounds per hour.
 - e. The permittee shall maintain a file of all measurements, performance testing requirements and test results, system performance evaluations, calibration checks, adjustments and maintenance as performed, and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, 40 CFR 60.13)

2. Specification Used Oil.

- a. The permittee shall maintain records of the following:

- i. The sampling date for every used oil analysis, amount of used oil the sample represents, date of analyses, and results of the analyses;
- ii. Date when the used oil is blended and the total amount blended; and
- iii. The total amount of specification used oil combusted on a daily and monthly basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, 40 CFR 60.13)

3. Inspection, Maintenance, and Repair Log.

An inspection, maintenance, and repair log shall be maintained for the equipment listed in Attachment II, Special Condition A.1. of this permit. Replacement of parts and repairs to the facility equipment shall be documented.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Visible Emissions (V.E.).

- a. With the exception of the month where the annual V.E. performance test is conducted pursuant to Special Condition No. D.4.b, The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each combustion turbine in accordance with Method 9 or by use of a Ringelmann Chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. 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 each combustion turbine by a certified reader in accordance with Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, §11-60.1-161)

5. All records required by this section shall include, if applicable:

- a. Monitoring location, date and time of sampling or measurements;
- b. Dates sampling analyses were performed;
- c. Name and address of the company or entity that performed the analyses;

- d. Analytical techniques or methods used;
- e. Analysis of results; and
- f. Operating conditions during the time of sampling or measurement.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. The permittee shall submit a written report of all excess emissions to the Hawaii Department of Health for **every calendar quarter**. Excess emissions shall be defined as:

“Any rolling 3-hour period during which the average emissions, as measured by the continuous emissions monitoring system or determined through calculations based on the information obtained from the continuous monitoring systems, exceed the emission limits set forth in Table 1 and Table 2 of Section C.1.e.,” and

“Any one (1) clock-hour period following start-up and preceding shutdown during which the average steam-to-fuel ratio, as measured by the continuous monitoring system, falls below the ratio specified in Special Condition C.1.b.i.”

The report shall include the following:

- a. The magnitude of excess emissions determined in accordance with 40 CFR 60.13 (h), any conversion factors used, and the date and time of commencement and completion of each individual time period of excess emissions.
- b. Specific identification of each individual period of excess emissions that occurs during startups, shutdowns, and malfunctions of the combustion turbines. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted, shall also be reported.
- c. The date and time identifying each period during which the continuous emission monitoring system was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described.
- d. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the continuous emission monitoring system operated properly during the period and was not subject to any repairs or adjustments except for zero and span checks.
- e. All reports shall be postmarked **by the 30th day** following the end of each calendar quarter. The enclosed form: *Excess Emissions and Monitoring System Performance Summary Report* shall be used in conjunction with the reporting of excess emissions.

- f. Excess emissions indicated by the continuous monitoring systems except during the two (2) hour start up and one (1) hour shut down period shall be considered violations of the applicable emission limit for the purposes of this permit following the completion of the source performance test and CEMs certification.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §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 exceedances due to emergencies); and*
 - c. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. The permittee shall report **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing, or 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. **At least thirty (30) days prior to** the following events, the permittee shall notify the Department of Health in writing of:
 - a. *Conducting a source performance test* as required by Attachment II, Section F, Testing Requirements.
 - b. *Conducting a performance specification test on the CEMS.* The testing date shall be in accordance with the performance test date identified in 40 CFR Part 60, Section 60.13.

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

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, a 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 include, at a minimum, the following information:

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

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

6. Annual Emissions.

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including any hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The enclosed Annual Emissions Report Form(s): *Fuel Consumption* shall be used in reporting.

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

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

7. The permittee shall submit **semi-annually** the following reports to the Department. 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 to December 31)**, and shall be signed and dated by an authorized representative.
 - a. The total fuel oil consumption on a monthly and 12-month rolling average basis. The enclosed Monitoring Report Form: *Fuel Consumption and Certification*, shall be used.

- 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 for each equipment there were no exceedances for that semi-annual period. The enclosed Monitoring Report Form: *Opacity Exceedances*, shall be used.
- c. The used oil analysis which indicated exceedances of the limits specified in this permit. 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: *Used Oil Consumption*, shall be used.
- d. The total amount of specification used oil combusted in the combustion turbines on a monthly and rolling twelve (12) month basis. The enclosed Monitoring Report Form: *Used Oil Consumption*, shall be used.

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

Section F. Testing Requirements

1. On an annual basis or at such times specified by the Department of Health, the permittee shall conduct or cause to be conducted a source performance test on the combustion turbines CT1 and CT2 for sulfur dioxide (SO₂), nitrogen oxide (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter. The performance tests shall be conducted at 60 percent and 80 percent of the maximum rated capacity, and the maximum operating (full load) capacity of each of the two combustion turbines being tested and at other operating capacities as may be specified by the Hawaii Department of Health.

The Department of Health may waive a specific performance test upon written request of the permittee. Such a request would require justification on the basis that prior test(s) had shown compliance by a wide margin, operations of the source have not changed since the previous source test, and adequate means exist to show continuing compliance.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. Performance tests for the emissions of SO₂, NO_x, CO, VOC, and particulate matter shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60, Appendix A, and 40 CFR 60, Part 60.8. The following test methods or EPA-approved equivalent methods with consent from the Department of Health shall be used:
 - a. Performance test for the emissions of SO₂ shall be conducted using EPA Methods 1-4 and 20.
 - b. Performance tests for the emissions of NO_x shall be conducted using EPA Methods 1-4 and 20.

- c. Performance tests for the emissions of CO shall be conducted using EPA Methods 1-4 and 10.
- d. Performance tests for the emissions of VOC shall be conducted using EPA Methods 1-4 and 25A.
- e. Performance tests for the emissions of particulate matter shall be conducted using EPA Methods 1-5.

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

- 3. The performance test shall consist of three (3) separate runs 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 §11-60.1-11, §11-60.1-90; 40 CFR 60.8; SIP §11-60-15)^{1,2}

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

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

- 5. **At least 30 days prior to performing a test**, the permittee shall submit a written performance test plan to the Department of Health that describes the test 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, §11-60.1-5, §11-60.1-11, §11-60.1-90)

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

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

- 7. **Within sixty (60) days after completion of the 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 combustion turbines and associated equipment which are tested at the time of the test, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

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

Section G. Agency Notification

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition 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 – INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0214-01-C**

Issuance Date:

Expiration Date:

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

Section A. Equipment Description

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

(Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

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

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

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

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

Section C. Monitoring and Recordkeeping Requirements

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. All records shall be maintained for at least 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

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 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.

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

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

(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 1, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0214-01-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 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
P. O. Box 3378
Honolulu, HI 96801-3378**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0214-01-C**

Issuance Date:

Expiration Date:

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

1. Complete the attached form(s):

Annual Emissions Report Form(s) Fuel Consumption

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

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

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information, including information concerning secret processes or methods of 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. 0214-01-C
PAGE 1 OF ____**

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 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. 0214-01-C
(CONTINUED, PAGE 2 OF ___)**

Issuance Date:

Expiration Date:

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

Instructions:

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

A. Attachment I, Standard Conditions

<u>Permit term/condition</u> All standard conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> • Continuous • Intermittent
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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> • Continuous • Intermittent
<u>Permit term/condition</u> All recordkeeping conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> • Continuous • Intermittent
<u>Permit term/condition</u> All reporting conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> • Continuous • Intermittent
<u>Permit term/condition</u> All testing conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> • Continuous • Intermittent
<u>Permit term/condition</u> All INSIG conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> • Continuous • Intermittent

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0214-01-C
(CONTINUED, PAGE ____ OF ____)**

Issuance Date:

Expiration Date:

C. Special Conditions - Operational and Emissions Limitations

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

<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Method</u>	<u>Compliance</u>
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent
		<ul style="list-style-type: none"> • monitoring • recordkeeping • reporting • testing • none of the above 	<ul style="list-style-type: none"> • Continuous • Intermittent

(Make Additional Copies if Needed)

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO.
(CONTINUED, PAGE ___ OF ___)**

Issuance Date:

Expiration Date:

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:	

(Make Additional Copies if Needed)

PROPOSED

**MONITORING REPORT FORM
FUEL CONSUMPTION AND CERTIFICATION
COVERED SOURCE PERMIT NO. 0214-01-C**

Issuance Date: _____

Expiration Date: _____

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

(Make copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Location: _____

Equipment Description: _____

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

Serial/ID No.: _____

Type of Fuel: _____ %Sulfur Content by Weight: _____ %Nitrogen: _____

%Ash: _____ %Lead: _____

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	12-MO. ROLLING AVERAGE	NOTES
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTAL			

**MONITORING REPORT FORM
USED OIL CONSUMPTION
COVERED SOURCE PERMIT No. 0214-01-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 **semi-annually** the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: _____ Date: _____

Facility Name: _____

Equipment Description: _____

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

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

Did any of the used oil analyses indicate exceedances of the permitted limits: • YES • NO
If Yes, indicate the number of exceedances: _____

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

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

2. Report the amount of spec used oil fired in the combustion turbines.

Month	Spec used oil consumed (gal)	12-Month Rolling Basis	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0214-01-C**

Issuance Date:

Expiration Date:

The **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 use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observation 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 five (5) percent increments (e.g., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. For V.E. observations of stacks, stand at least three (3) stack heights but not more than a quarter mile from the stack.
4. For V.E. observations of fugitive emissions from crushing and screening plants, stand at least 4.57 meters (15 feet) from the visible emissions source, but not more than a quarter mile from the visible emission source.
5. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
6. The six (6) minute average opacity reading shall be calculated for each observation.
7. If possible, the observations shall be performed as follows:
 - a. Read from where the line of sight is at right angles to the wind direction.
 - b. The line of sight shall not include more than one (1) plume at a time.
 - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
 - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
 - e. The equipment shall be operating at the maximum permitted capacity.
8. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

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

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

PROPOSED

VISIBLE EMISSIONS FORM
COVERED SOURCE PERMIT NO. 0214-01-C

Issuance Date: _____

Expiration Date: _____

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

Company Name: _____

For stacks, describe equipment and fuel: _____

For fugitive emissions from crushers and screens, describe:

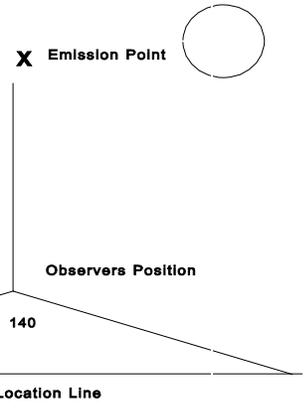
Fugitive emission point: _____

Plant Production (tons/hr): _____

(During observation)

Stack
 Sun
 Wind

Draw North Arrow



Site Conditions:

Emission point or stack height above ground (ft): _____

Emission point or stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

Wind speed (mph): _____

Temperature (°F): _____

Observer Name: _____

Certified? (Yes/No): _____

Observation Date and Start Time: _____

Method of observation (Ringelmann Chart or Method 9): _____

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

Observation Date and Start Time: _____

Method of observation (Ringelmann Chart or Method 9): _____

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

PROPOSED

**ANNUAL EMISSIONS REPORT FORM
FUEL CONSUMPTION
COVERED SOURCE PERMIT NO. 0214-01-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: _____

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

Serial/ID No.: _____

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

Responsible Official (PRINT): _____

TITLE: _____

Responsible Official (Signature): _____

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; ● If Other, specify.
 ● Fuel Oil Reclaimed or Spec Used Oil;
 ● Distillate Oil (No. 2);
 ● Liquefied Petroleum Gas, Butane or Propane;

<u>Type of Air Pollution Control</u>	<u>In Use?</u>	<u>Pollutant(s) Controlled</u>	<u>Control Efficiency, % Reduction</u>
_____	<u>Yes or No</u>	_____	_____
_____	<u>Yes or No</u>	_____	_____
_____	<u>Yes or No</u>	_____	_____

EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE
SUMMARY REPORT

(PAGE 1 OF 2)

(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**

(CONTINUED, 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): _____