

**PROPOSED**

Issue Date

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

15-xxxE CAB  
File No. 0031

Mr. John Mauri  
Manager, Power Supply  
Maui Electric Company, Ltd.  
P.O. Box 398  
Kahului, Hawaii 96733

Dear Mr. Mauri:

**SUBJECT: Covered Source Permit (CSP) No. 0031-04-C**  
**Application for Renewal No. 0031-07**  
**Maui Electric Company, Ltd. (Maui Electric)**  
**Palaau Generating Station**  
**Nine (9) Diesel Engine Generators and One (1) Combustion Turbine**  
**Located At: 32 Ulili Street, Kaunakakai, Molokai**  
**Date of Expiration: 5 Years from Issue 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 that you submitted as part of your application received on May 27, 2011, and the additional information received on May 21, 2012, and June 3, 2013. This permit supersedes CSP No. 0031-04-C, issued on May 31, 2007, in its entirety.

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

- Attachment I: Standard Conditions
- Attachment IIA: Special Conditions – Diesel Engine Generators
- Attachment IIB: Special Conditions – Combustion Turbine
- Attachment II – INSIG: Special Conditions – Insignificant Activities
- Attachment III: Annual Fee Requirements
- Attachment IV: Annual Emissions Reporting Requirements

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Mr. John Mauri  
Issue Date  
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The following forms are enclosed for your use and submittal as required:

Compliance Certification Form  
Annual Emissions Report Form: Combustion Turbine Generator and Diesel Engine  
Generators  
Monitoring Report Form: Fuel Consumption  
Monitoring Report Form: Fuel Certification  
Monitoring Report Form: Specification Used Oil  
Monitoring Report Form: FITR Certification  
Monitoring Report Form: Opacity Exceedances  
Excess Emission and Monitoring System Performance (CEMS) Summary Report  
Excess Emissions and Continuous Monitoring System (CMS) Performance Report  
and/or Summary Report Form (RICE NESHAP)

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

Visible Emissions Form Requirements, State of Hawaii  
Visible Emissions Form

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

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

Sincerely,

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

MS:dh

Enclosures

c: Blake Shiigi, EHS – Maui  
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS  
COVERED SOURCE PERMIT NO. 0031-04-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)<sup>2</sup>

3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department, except as provided in HAR, Section 11-60.1-91.

(Auth.: HAR §11-60.1-7; SIP §11-60-9)<sup>2</sup>

4. A request for transfer from person to person shall be made on forms furnished by the Department.

(Auth.: HAR §11-60.1-7)

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

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

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

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

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:
- 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)<sup>2</sup>

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

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

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

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

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

(Auth.: HAR §11-60.1-93)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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

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

## PROPOSED

### ATTACHMENT IIA: SPECIAL CONDITIONS – DIESEL ENGINE GENERATORS COVERED SOURCE PERMIT NO. 0031-04-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 equipment and associated appurtenances:

<u>Unit Nos.</u>	<u>Description</u>
CAT1, CAT2	1.25 MW Caterpillar diesel engine generators (model no. 3516, serial nos. 25Z00574, 25Z00575), 12.62 MMBtu/hr;
CUM3, CUM4, CUM6	1.0 MW Cummins diesel engine generators (model no. KTA50, serial nos. 33112906, 33108992, 33120964), 9.09 MMBtu/hr;
CUM5	1.0 MW Cummins diesel engine generator (model no. KTTA50, serial no. 33110779), 9.52 MMBtu/hr; and
CAT7, CAT8, CAT9	2.2 MW Caterpillar diesel engine generators (model no. 3608, serial nos. 6MC00452, 6MC00453, 6MC00454), 23.38 MMBtu/hr.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or name plate on each equipment, which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

#### **Section B. Applicable Federal Regulations**

1. The diesel engine generators are subject to the provisions of the following federal regulations:
  - a. 40 Code of Federal Regulations (CFR) Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions; and
  - b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

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

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

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

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

#### 1. Fuel Specifications

- a. CUM3–CUM6 and CAT7–CAT9 shall be fired only on the following fuels:
  - i. Diesel with the following specifications:
    - (1) Maximum sulfur content not to exceed 0.0015% by weight; and
    - (2) Minimum cetane index of forty (40) or maximum aromatic content of thirty-five (35) volume percent.
  - ii. Specification used oil meeting the requirements in Attachment IIA, Special Condition No. C.5;
  - iii. Alternate fuels in accordance with Attachment IIA, Special Condition No. C.7; or
  - iv. Any combination thereof.
- b. CAT1 and CAT2 shall be fired only on the following fuels:
  - i. Diesel with the following specifications:
    - (1) Maximum sulfur content not to exceed 0.0015% by weight; and
    - (2) Minimum cetane index of forty (40) or maximum aromatic content of thirty-five (35) volume percent.
  - ii. Alternate fuels in accordance with Attachment IIA, Special Condition No. C.7; or
  - iii. Any combination thereof.
- c. The total combined fuel consumption of CUM3–CUM6 shall not exceed 1,650,000 gallons in any rolling twelve-month (12-month) period.
- d. The total combined specification used oil consumption of CUM3–CUM6 and CAT7–CAT9 shall not exceed 10,000 gallons in any rolling twelve-month (12-month) period.
- e. Fuel additives (that do not increase emissions) may be used to reduce corrosion, control biological growth, enhance combustion, etc.

(Auth.: HAR §11-60.1-3, §11-60.1-38, §11-60.1-90; 40 CFR §63.6604)<sup>1</sup>

2. Visible Emissions

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

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

3. Maximum Emission Limits

- a. The permittee shall not discharge or cause the discharge of nitrogen oxides (as NO<sub>2</sub>) into the atmosphere from CAT1, CAT2, and CUM3–CUM6 in excess of the following specified limits:

Unit No.	Maximum Emission Limit (3-hour Average)	
	(lbs/hr)	(ppmvd @ 15 percent O <sub>2</sub> )
CUM3, CUM4, CUM6	19.51	583
CUM5	19.39	520
CAT1, CAT2	27.10	550

- b. The permittee shall not discharge or cause the discharge of nitrogen oxides (as NO<sub>2</sub>), sulfur dioxide, particulate matter, carbon monoxide, and volatile organic compounds into the atmosphere from CAT7–CAT9 in excess of the following specified limits:

Pollutant	Maximum Emission Limit (3-hour Average)	
	(lbs/hr)	(ppmvd @ 15 percent O <sub>2</sub> )
Nitrogen Oxides (as NO <sub>2</sub> )	51.56	656
Sulfur Dioxide	9.34	76
Particulate Matter	2.69	0.076 <sup>1</sup>
Carbon Monoxide	10.19	210
Volatile Organic Compounds	2.23	81

1. Units are grains per dry standard cubic feet corrected to twelve (12) percent CO<sub>2</sub>.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-140)

4. Air Pollution Control

- a. For CUM3, CUM4, and CUM6, the permittee shall operate and maintain a fuel injection timing retard (FITR) of 4.5° from initial factory settings to meet the emission limits as specified in Attachment IIA, Special Condition No. C.3.
- b. For CUM5, the permittee shall operate and maintain a FITR of 7.5° from initial factory settings to meet the emission limit as specified in Attachment IIA, Special Condition No. C.3.

- c. For CAT7–CAT9, the permittee shall operate and maintain a FITR of 13° (9° from initial factory settings) to meet the emission limits as specified in Attachment IIA, Special Condition No. C.3.
- d. For CAT1 and CAT2, the permittee shall operate and maintain a FITR of 5° from initial factory settings to meet the emission limits as specified in Attachment IIA, Special Condition No. C.3.
- e. The use of an alternative control system(s) other than those specified above is contingent upon receiving written approval from the Department to use such a system and shall not relieve the permittee from the responsibility to meet all emission limitations contained within this permit.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

5. Specification (Spec) Used Oil

- a. The permit conditions prescribed herein may be revised at any time by the Department to conform to any state or federal promulgated rules on used oil.
- b. This permit does not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing, and burning of used oil.
- c. This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if declared or determined to be hazardous waste.
- d. The used oil shall consist of used oil, mixtures of used oil, and materials containing used oil in accordance with HAR Title 11, Chapter 279.
- e. The used oil shall be obtained from equipment owned, operated, or maintained by Maui Electric. Used oil may also be obtained from other sources, provided a written request identifying the new source is submitted to the Department, and approved, prior to the acceptance of the used oil. An analysis shall accompany each delivery of spec used oil received from other sources to determine compliance with the limits specified in Attachment IIA, Special Condition No. C.5.g.
- f. The used oil shall be sampled and analyzed prior to blending with any fuel oil and/or burning in the diesel engine generators.
- g. The following constituents/properties of the specification used oil shall not exceed the limits listed below:

<b><u>Constituent/Property</u></b>	<b><u>Allowable Limit</u></b>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Sulfur	0.0015% maximum by weight
Flash Point	100 °F minimum
Polychlorinated Biphenyls (PCB)	< 2 ppm

- h. Fuel blending to meet the constituent/property limits specified in Attachment IIA, Special Condition No. C.5.g, is allowable only for spec used oil that was not deemed hazardous waste.

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

- 6. The permittee shall comply with the following requirements for each diesel engine generator:
  - a. Install, operate, and maintain an oxidation catalyst;
  - b. Except during periods of startup:
    - i. Limit concentration of carbon monoxide (CO) in the engine exhaust to twenty-three (23) ppmvd at fifteen (15) percent O<sub>2</sub>; or
    - ii. Reduce CO emissions by seventy (70) percent or more.
  - c. Except during periods of startup, maintain the catalyst so that the pressure drop across the catalyst does not change by more than two (2) inches of water from the pressure drop across the catalyst that was measured during the initial performance test or subsequent performance test as provided in 40 CFR §63.6640(b);
  - d. Except during periods of startup, maintain the temperature of the diesel engine generator's exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F, or other temperature range as approved by the EPA;
  - e. Install, operate, and maintain either of the following control equipment:
    - i. A closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere; or
    - ii. An open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.
  - f. Minimize the diesel engine generator's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes, after which time the emission limits applicable to all times other than startup apply.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §63.6603, §63.6625)<sup>1</sup>

7. Alternate Operating Scenario

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

- i. A request for the replacement unit shall be submitted in accordance with Attachment IIA, Special Condition No. E.9.a;
  - ii. The temporary replacement unit must be similar in size with equal or lesser emissions and with similar stack parameters;
  - iii. The temporary replacement unit shall comply with all applicable conditions including all air pollution control equipment requirements, operating restrictions, and emission limits;
  - iv. The installation and operation of the temporary replacement unit shall not exceed twelve (12) consecutive months;
  - v. The diesel engine generator shall be repaired and returned to service at the same location in a timely manner; and
  - vi. Removal and return information shall be submitted in accordance with Attachment IIA, Special Condition No. E.9.b.
- b. The Department may require an ambient air quality assessment of the temporary unit, and/or provide a conditional approval to impose additional monitoring, testing, recordkeeping, and reporting requirements to ensure the temporary unit is in compliance with the applicable requirements of the permitted unit being temporarily replaced.
  - c. The permittee may fire the diesel engine generators on an alternate fuel. A request to fire the diesel engine generators on an alternate fuel shall be submitted in accordance with Attachment IIA, Special Condition No. E.9.c;
  - d. The Department may require an ambient air quality assessment for firing the alternate fuel and/or provide a conditional approval to impose additional monitoring, testing, recordkeeping, and reporting requirements.
  - e. Records shall be maintained in accordance with Attachment IIA, Special Condition No. D.9.
  - f. The terms and conditions under each operating scenario shall meet all applicable requirements, including special conditions of this permit.

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

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

##### 1. Records

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

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

2. Fuel Consumption

- a. A non-resetting fuel meter shall be installed, operated, and maintained on CUM3–CUM6 and CAT7–CAT9 for the permanent recording of the total gallons of fuel consumed. The non-resetting meter shall not allow the manual resetting or other manual adjustments of the meter readings. The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading. The following information shall be recorded:
  - i. Type of fuel fired;
  - ii. Date of meter readings;
  - iii. Beginning and ending meter readings for each month;
  - iv. Total gallons of fuel consumed for each month; and
  - v. Total gallons of fuel consumed on a rolling twelve-month (12-month) basis.
- b. The permittee shall maintain records on the total gallons of fuel consumed by CAT1 and CAT2 on an annual basis.

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

3. Fuel Specification

- a. Fuel purchase receipts, showing the fuel type, sulfur content (percent by weight), cetane index or aromatic content (volume percent), date of delivery, and amount (gallons) of fuel delivered to the site for the diesel engine generators shall be maintained. Fuel sulfur content, cetane index, and aromatic content may be demonstrated by providing the supplier's fuel specification sheet for the type of fuel purchased and received.
- b. Used Oil Sample Collection and Analysis

A representative sample shall be taken of the used oil prior to burning in the diesel engine generators. Used oil samples shall be taken in such a manner that sampling is representative of the used oil collected. Each sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/properties to determine compliance with the limits specified in Attachment IIA, Special Condition No. C.5.g. The laboratory analysis of the collected used oil shall be obtained prior to blending with any fuel oil.

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

4. Inspection, Maintenance, and Repair Log

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

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

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

5. Oxidation Catalysts

- a. The permittee shall install, operate, and maintain a continuous parameter monitoring system (CPMS) on each diesel engine generator to monitor and record the catalyst inlet temperature. The permittee must prepare a site-specific monitoring plan. The CPMS and the site-specific monitoring plan must meet the requirements of 40 CFR §63.6625(b).
- b. The permittee shall measure and record the pressure drop across the oxidation catalyst once per month, except during months in which the diesel engine generator does not operate, for the purpose of demonstrating compliance with the requirement of Attachment IIA, Special Condition No. C.6.c.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §63.6625, §63.6640, §63.6655)<sup>1</sup>

6. Continuous Emission Monitoring Systems (CEMS)

- a. The permittee shall at its own expense operate and maintain a CEMS for CAT7–CAT9 to measure NO<sub>x</sub> (as NO<sub>2</sub>) and CO<sub>2</sub> or O<sub>2</sub> concentrations in the stack gas. The system shall meet U.S. EPA performance specifications (40 CFR Part 60 Section 60.13 and 40 CFR Part 60, Appendix B and Appendix F). If CO<sub>2</sub> is measured with the CEMS to adjust the pollutant concentration, the CO<sub>2</sub> correction factor equations listed in 40 CFR §60.4213(d)(3) shall be used to determine compliance with the applicable emissions limit. The emissions for NO<sub>x</sub> shall be recorded in parts per million by volume dry (ppmvd) at fifteen (15) percent O<sub>2</sub> and pounds per hour (lb/hr).
- b. A single emission monitoring system operating sequentially to measure individual emissions from CAT7–CAT9 is acceptable.
- c. Quarterly accuracy audits and daily calibration drift tests shall be performed in accordance with 40 CFR Part 60, Appendix F. Successive quarterly audits shall occur no closer than two (2) months. RATA must be conducted at least once every four calendar quarters. The test reports shall be postmarked by the **60<sup>th</sup> day** after completion of the RATA.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.13, 40 CFR Part 60 Appendix B and F)<sup>1</sup>

7. Visible Emissions

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

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

8. Performance Test

Performance tests shall be conducted on the diesel engine generators pursuant to Attachment IIA, Section F. Test summaries and results shall be maintained in accordance with the requirements of this section.

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

9. Alternate Operating Scenario

The permittee shall contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility, the scenario under which it is operating.

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

**Section E. Notification and Reporting Requirements**

1. Standard Conditions Reporting

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

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

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

2. Deviations

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

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

3. Annual Emissions Reports

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

**Annual Emissions Report Form: Combustion Turbine Generator and Diesel Engine Generators.**

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

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

4. Monitoring Reports

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 - December 31), and shall be signed and dated by a responsible official: The following enclosed forms shall be used for reporting:

**Monitoring Report Form: Fuel Consumption;**  
**Monitoring Report Form: Fuel Certification;**  
**Monitoring Report Form: Specification Used Oil;**  
**Monitoring Report Form: FITR Certification;** and  
**Monitoring Report Form: Opacity Exceedances.**

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

5. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, 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;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department, including information to determine compliance.

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

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

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

6. Compliance Reports

The permittee shall submit semi-annual compliance reports to the Department and U.S. EPA, Region 9, in accordance with 40 CFR §63.6650. The report shall be submitted within **thirty-one (31) days** after the end of each semi-annual reporting period (January 1 - June 30 and July 1 - December 31). The enclosed **Excess Emissions and Continuous Monitoring System (CMS) Performance Report and/or Summary Report Form (RICE NESHAP)** or an equivalent form shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §63.6650)<sup>1</sup>

7. Excess Emissions

The permittee shall submit **semi-annually** to the Department and U.S. EPA, Region 9, an excess emissions and monitoring systems performance report and/or summary report for CAT7–CAT9 in accordance with 40 CFR §§60.7(c) and (d).

- a. If the total duration of excess emissions for the reporting period is less than one (1) percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than five (5) percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR §60.7(c) need not be submitted unless requested by the Department.
- b. If the total duration of excess emissions for the reporting period is one (1) percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five (5) percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR §60.7(c) shall both be submitted. The excess emissions report shall include the following information:
  - i. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the corresponding load of the diesel engine generators. The process operating time during the reporting period.
  - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the diesel engine generator(s). The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted.
  - iii. The date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
  - iv. When no excess emissions have occurred or the CEMS has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- c. Excess emissions of NO<sub>x</sub> (as NO<sub>2</sub>) shall be defined as any three (3) hour period during which the average emissions, as measured by the CEMS, exceeds the maximum emissions specified for NO<sub>x</sub> in Attachment IIA, Special Condition No. C.3.b.
- d. All reports shall be postmarked by the **30<sup>th</sup> day** following the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31). The enclosed **Excess Emission and Monitoring System Performance (CEMS) Summary Report** form or an equivalent form shall be submitted.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §60.7)<sup>1</sup>

8. Performance Testing

- a. At least **thirty (30) days** prior to conducting a source performance test pursuant to Attachment IIA, Section F.1, the permittee shall submit a performance test plan in accordance with Attachment IIA, Special Condition No. F.1.c.
- b. Within **sixty (60) days** after completion of a source performance test pursuant to Attachment IIA, Section F.1, the permittee shall submit a test report in accordance with Attachment IIA, Special Condition No. F.1.d.
- c. At least **sixty (60) days** prior to conducting a source performance test pursuant to Attachment IIA, Section F.2, the permittee shall submit a performance test plan in accordance with Attachment IIA, Special Condition No. F.2.a.
- d. Within **sixty (60) days** after completion of a source performance test pursuant to Attachment IIA, Section F.2, the permittee shall submit a test report in accordance with Attachment IIA, Special Condition No. F.2.b.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §60.8, §63.7)<sup>1</sup>

9. Alternate Operating Scenario

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

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

**Section F. Testing Requirements**

1. On an **annual** basis or at other such times as may be specified by the Department, the permittee shall conduct or cause to be conducted performance tests on the diesel engine generators to demonstrate compliance with the requirements of Attachment IIA, Special Condition No. C.3. Performance tests shall be conducted on CAT1, CAT2, and CUM3–CUM6 for nitrogen oxides (as NO<sub>2</sub>), and on CAT7–CAT9 for particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (as NO<sub>2</sub>), carbon monoxide (CO), and volatile organic compounds (VOC).

- a. The tests shall be conducted at the maximum expected operating capacity of the diesel engine generators or highest achievable load. The following test methods, U.S. EPA approved equivalent methods, or alternate methods with prior written approval from the Department shall be used:
  - i. Methods 1-4 and 5 for the emissions of PM;
  - ii. For the emissions of SO<sub>2</sub>:
    - 1) Methods 1-4 and 6C; or
    - 2) Method 19 and the supplier's fuel specification or fuel analysis.
  - iii. Methods 1-4 and 7E for the emissions of NO<sub>x</sub>;
  - iv. Methods 1-4 and 10 for the emissions of CO; and
  - v. Methods 1-4 and 25A, for the emissions of VOC (Method 18 may be used as an alternative to Method 25A).
- b. Note that Method 1 cannot be used under the following conditions:
  - i. Cyclonic or swirling gas flow at the sampling location;
  - ii. Stack or duct with a diameter less than twelve (12) inches or a cross-sectional area less than 113 square inches; or
  - iii. Sampling location less than two (2) stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.
- c. At least **thirty (30) days** prior to conducting a performance test, the permittee shall submit a written performance test plan to the Department and U.S. EPA, Region 9, that includes date(s) of the test, test duration, test locations, test methods, source operation, and other parameters that may affect the test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.
- d. Within **sixty (60) days** after completion of a performance test, the permittee shall submit to the Department and U.S. EPA, Region 9, the test report which shall include the operating conditions of the diesel engine generators at the time of the test, analysis of the fuel (if applicable), summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.
- e. Upon written request and justification, the Department may waive the requirement for, or a portion of, a specific performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior performance test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

2. The permittee shall conduct or cause to be conducted initial performance tests on the diesel engine generators to demonstrate compliance with the requirements of Attachment IIA, Special Condition No. C.6.b, no later than October 30, 2013. Performance tests shall be conducted for carbon monoxide (CO). The catalyst pressure drop and catalyst inlet temperature shall also be measured and recorded. Subsequent performance tests shall be conducted after every 8,760 hours of operation or three (3) years of operation, whichever comes first. Performance tests shall be conducted under such conditions as the EPA specifies to the permittee based on representative performance (i.e., performance based on normal operating conditions) of the diesel engine generator. Performance tests for emissions of CO shall be conducted and results recorded and reported in accordance with the test methods and procedures set forth in 40 CFR §63.6620.

- a. At least **sixty (60) days** prior to conducting a performance test, the permittee shall submit a written performance test plan to the Department and U.S. EPA, Region 9, that includes date(s) of the test, test duration, test locations, test methods, source operation, and other parameters that may affect the test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.
- b. Within **sixty (60) days** after completion of a performance test, the permittee shall submit to the Department and U.S. EPA, Region 9, the test report which shall include the operating conditions of the diesel engine generators at the time of the test (e.g., engine percent load, catalyst pressure drop and inlet temperature, etc.), summarized test results, comparative results with the emission limits specified in Attachment IIA, Special Condition No. C.6.b, other pertinent support calculations, and field/laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.7, §63.6612, §63.6615, §63.6620)<sup>1</sup>

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

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

4. 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 of the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §60.8, §63.7)<sup>1</sup>

5. 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 before the tests.

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

**Section G. Agency Notification**

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

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

**ATTACHMENT IIB: SPECIAL CONDITIONS – COMBUSTION TURBINE  
COVERED SOURCE PERMIT NO. 0031-04-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 equipment and associated appurtenances:

<u>Unit No.</u>	<u>Description</u>
CT1	2.0 MW Solar International combustion turbine (model no. Centaur T4001), 34 MMBtu/hr.

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or name plate on each equipment, which identifies the model no., serial no., and manufacturer. The identification tag or name plate shall be attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section B. Applicable Federal Regulations**

1. CT1 is subject to the provisions of the following federal regulations:
  - a. 40 Code of Federal Regulations (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)<sup>1</sup>

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

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

**Section C. Operational and Emissions Limitations**

1. Minimum Operating Load

The minimum CT1 load shall not be less than twenty-five (25) percent of the rated capacity at any one time, except during CT1 start-up, shut-down, maintenance, and/or testing.

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

2. Fuel Specifications

- a. CT1 shall be fired only on diesel with a maximum sulfur content not to exceed 0.4 percent by weight, alternate fuels in accordance with Attachment IIB, Special Condition No. C.4, or any combination thereof.
- b. The total fuel consumption of CT1 shall not exceed 1,230,000 gallons in any rolling twelve-month (12-month) period.

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

3. Visible Emissions

For any six (6) minute averaging period, CT1 shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, CT1 may exhibit visible emissions not greater than sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

4. Alternate Operating Scenario

- a. The permittee may replace CT1 with a temporary replacement unit if any repair reasonably warrants the removal of CT1 from its site (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) and the following provisions are adhered to:
  - i. A request for the replacement unit shall be submitted in accordance with Attachment IIB, Special Condition No. E.6.a;
  - ii. The temporary replacement unit must be similar in size with equal or lesser emissions and with similar stack parameters;
  - iii. The temporary replacement unit shall comply with all applicable conditions including all air pollution control equipment requirements, operating restrictions, and emission limits;
  - iv. The installation and operation of the temporary replacement unit shall not exceed twelve (12) consecutive months;
  - v. CT1 shall be repaired and returned to service at the same location in a timely manner; and

- vi. Removal and return information shall be submitted in accordance with Attachment IIB, Special Condition No. E.6.b.
- b. The Department may require an ambient air quality assessment of the temporary unit, and/or provide a conditional approval to impose additional monitoring, testing, recordkeeping, and reporting requirements to ensure the temporary unit is in compliance with the applicable requirements of the permitted unit being temporarily replaced.
- c. The permittee may fire CT1 on an alternate fuel. A request to fire CT1 on an alternate fuel shall be submitted in accordance with Attachment IIB, Special Condition No. E.6.c.
- d. The Department may require an ambient air quality assessment for firing the alternate fuel and/or provide a conditional approval to impose additional monitoring, testing, recordkeeping, and reporting requirements.
- e. Records shall be maintained in accordance with Attachment IIB, Special Condition No. D.6.
- f. The terms and conditions under each operating scenario shall meet all applicable requirements, including special conditions of this permit.

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

**Section D. Monitoring and Recordkeeping Requirements**

1. Records

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

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

2. Fuel Consumption

A non-resetting fuel meter shall be installed, operated, and maintained on CT1 for the permanent recording of the total gallons of fuel consumed. The non-resetting meter shall not allow the manual resetting or other manual adjustments of the meter readings. The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading. The following information shall be recorded:

- a. Date of meter readings;
- b. Beginning and ending meter readings for each month;

- c. Total gallons of fuel consumed for each month; and
- d. Total gallons of fuel consumed on a rolling twelve-month (12-month) basis.

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

### 3. Fuel Specification

- a. The permittee shall maintain records of all fuel deliveries identifying the delivery dates and the type and amount of fuel received.
- b. The sulfur content of the fuel oil no. 2 to be fired in CT1 shall be determined by one of the sampling options and associated sampling frequency specified in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of 40 CFR Part 75, Appendix D. The fuel analysis may be performed by the permittee, the fuel supplier, or another qualified third party. The analysis shall be performed using one of the following ASTM International (ASTM) methods: D129-00, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01, or a more current version of these ASTM methods.

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

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

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

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

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

### 5. Visible Emissions

The permittee shall conduct **monthly** (calendar month) visible emissions observations for CT1 by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9, or U.S. EPA approved equivalent methods, or alternative methods with prior written approval from the Department. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

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

6. Alternate Operating Scenario

The permittee shall contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility, the scenario under which it is operating.

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

**Section E. Notification and Reporting Requirements**

1. Standard Conditions Reporting

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

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

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

2. Deviations

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

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

3. Annual Emissions Reports

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

**Annual Emissions Report Form: Combustion Turbine Generator and Diesel Engine Generators.**

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

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

#### 4. Monitoring Reports

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 - December 31), and shall be signed and dated by a responsible official: The following enclosed forms shall be used for reporting:

**Monitoring Report Form: Fuel Consumption;**  
**Monitoring Report Form: Fuel Certification;** and  
**Monitoring Report Form: Opacity Exceedances.**

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

#### 5. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, 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;
- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR 64 occurred; and
- g. Any additional information as required by the Department, including information to determine compliance.

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

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

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

6. Alternate Operating Scenario

- a. The permittee shall submit a written request and receive prior written approval from the Department before exchanging CT1 with a temporary replacement unit. The written request shall identify, at a minimum, the reasons for the replacement of CT1 from the site of operation and the estimated time period/dates for the temporary replacement, type and size of the temporary unit, emissions data, and stack parameters.
- b. Prior to the removal and return of CT1, the permittee shall submit to the Department written documentation on the removal and return dates and on the make, size, model, and serial numbers for both the temporary replacement unit and the installed unit.
- c. The permittee shall submit a written request and receive prior written approval from the Department before firing CT1 on an alternate fuel. The written request shall identify, at a minimum, the type of fuel proposed, reasons for using the alternate fuel, and emissions data.

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

**Section F. Agency Notification**

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

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

**ATTACHMENT II – INSIG  
SPECIAL CONDITIONS – INSIGNIFICANT ACTIVITIES  
COVERED SOURCE PERMIT NO. 0031-04-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 may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

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

**Section C. Monitoring and Recordkeeping Requirements**

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

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

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

**Section D. Notification and Reporting**

Compliance Certification

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

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

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

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

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

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

**Section E. Agency Notification**

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0031-04-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 **one-hundred twenty (120) 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.
4. The annual fees and the emission data shall be mailed to:

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

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS  
COVERED SOURCE PERMIT NO. 0031-04-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: Combustion Turbine Generator and Diesel Engine Generators

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

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

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

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, 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.

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**COMPLIANCE CERTIFICATION FORM  
 TEMPORARY COVERED SOURCE PERMIT NO. 0031-04-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</u> All Equipment listed in the permit	<u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent
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**B. Special Conditions - Monitoring, Recordkeeping, Reporting, Testing, and INSIG**

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

**COMPLIANCE CERTIFICATION FORM  
 TEMPORARY COVERED SOURCE PERMIT NO. 0031-04-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 piece of equipment shall be identified using the description stated in Section A of the Special Conditions (e.g., unit no., model no., serial no., etc.). Check all methods (as required by permit) used to determine the compliance status of the respective permit term/condition.

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

**(Make Additional Copies if Needed)**

**COMPLIANCE CERTIFICATION FORM  
 TEMPORARY COVERED SOURCE PERMIT NO. 0031-04-C  
 (CONTINUED, PAGE \_\_\_ OF \_\_\_)**

**Issuance Date:**

**Expiration Date:**

**D. Deviations**

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

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

**(Make Additional Copies if Needed)**

**ANNUAL EMISSIONS REPORT FORM  
COMBUSTION TURBINE GENERATOR AND DIESEL ENGINE GENERATORS  
COVERED SOURCE PERMIT NO. 0031-04-C  
(PAGE 1 OF 4)**

**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 Reporting Period: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

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

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

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

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

1. Report the total fuel consumption and maximum sulfur content for each type of fuel fired during the calendar year:

<b>CAT1</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
12.62 MMBtu/hr			

<b>CAT2</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
12.62 MMBtu/hr			

<b>CUM3</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
9.09 MMBtu/hr			

**ANNUAL EMISSIONS REPORT FORM  
 COMBUSTION TURBINE GENERATOR AND DIESEL ENGINE GENERATORS  
 COVERED SOURCE PERMIT NO. 0031-04-C  
 (CONTINUED, PAGE 2 OF 4)**

**Issuance Date:** **Expiration Date:**

<b>CUM4</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
9.09 MMBtu/hr			

<b>CUM5</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
9.52 MMBtu/hr			

<b>CUM6</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
9.09 MMBtu/hr			

<b>CAT7</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
23.38 MMBtu/hr			

<b>CAT8</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
23.38 MMBtu/hr			

<b>CAT9</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
23.38 MMBtu/hr			

<b>CT1</b>			
Maximum Design Heat Input Rate	Fuel Type	Fuel Use (gallons)	Maximum Sulfur Content (% by weight)
34 MMBtu/hr			

**ANNUAL EMISSIONS REPORT FORM  
COMBUSTION TURBINE GENERATOR AND DIESEL ENGINE GENERATORS  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, PAGE 3 OF 4)**

**Issuance Date:**

**Expiration Date:**

2. Report the type of air pollution control, pollutant(s) controlled, and control efficiency:

<b>CAT1</b>			
Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

<b>CAT2</b>			
Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

<b>CUM3</b>			
Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

<b>CUM4</b>			
Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

<b>CUM5</b>			
Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

<b>CUM6</b>			
Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

**ANNUAL EMISSIONS REPORT FORM  
COMBUSTION TURBINE GENERATOR AND DIESEL ENGINE GENERATORS  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, PAGE 4 OF 4)**

**Issuance Date:**

**Expiration Date:**

**CAT7**

Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

**CAT8**

Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

**CAT9**

Type of Air Pollution Control	In Use?	Pollutant(s) Controlled	Control Efficiency / % Reduction

**MONITORING REPORT FORM  
FUEL CONSUMPTION  
COVERED SOURCE PERMIT NO. 0031-04-C  
(PAGE 1 OF 2)**

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

**Expiration Date:** \_\_\_\_\_

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

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

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

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

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

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

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

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

1. Report the total combined fuel consumption of CUM3–CUM6 for the reporting period:

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

**MONITORING REPORT FORM  
FUEL CONSUMPTION  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, PAGE 2 OF 2)**

**Issuance Date:**

**Expiration Date:**

2. Report the total fuel consumption of CT1 for the reporting period:

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

**MONITORING REPORT FORM  
FUEL CERTIFICATION  
COVERED SOURCE PERMIT NO. 0031-04-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 Reporting Period: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

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

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

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

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

1. Report the maximum sulfur content and the minimum cetane index or maximum aromatic content of each type of fuel fired in the diesel engine generators for the reporting period:

Fuel Type	Maximum Sulfur Content (% by Weight)	Minimum Cetane Index	Maximum Aromatic Content (Volume %)

2. Report the maximum sulfur content of the fuels fired in CT1 for the reporting period:

Fuel Type	Maximum Sulfur Content (% by Weight)

3. Report the name and amount of fuel additives used for the reporting period

Name	Quantity

**MONITORING REPORT FORM  
SPECIFICATION USED OIL  
COVERED SOURCE PERMIT NO. 0031-04-C  
(PAGE 1 OF 2)**

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

**Expiration Date:** \_\_\_\_\_

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

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

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

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

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

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

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

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

1. Report the total combined specification used oil consumption for CUM3–CUM6 and CAT7–CAT9 for the reporting period:

Month	Total Combined Specification Used Oil Consumption (gallons)	
	Monthly Basis	12-Month Rolling Basis
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

**MONITORING REPORT FORM  
SPECIFICATION USED OIL  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, 2 OF 2)**

**Issuance Date:**

**Expiration Date:**

2. Report the maximum pollutant concentrations of the specification used oil analyzed during the reporting period:

Pollutant	Maximum Concentration (ppm)	Number of Exceedances	Notes
Arsenic			
Cadmium			
Chromium			
Lead			
Total Halogens			
Sulfur			
PCBs			

3. Report the minimum flash point in °F for the specification used oil analyzed during the reporting period: \_\_\_\_\_.





**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (CEMS)  
SUMMARY REPORT  
COVERED SOURCE PERMIT NO. 0031-04-C  
(PAGE 1 OF 2)**

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

**Expiration Date:** \_\_\_\_\_

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

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

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

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

Serial/ID Number: \_\_\_\_\_

**Pollutant Monitored:** \_\_\_\_\_

From: Date: \_\_\_\_\_ Time: \_\_\_\_\_

To: Date: \_\_\_\_\_ Time: \_\_\_\_\_

Emission Limitation: \_\_\_\_\_

Date of Last CEMS Certification/Audit: \_\_\_\_\_

**Total Source Operating Time:** \_\_\_\_\_

EMISSION DATA SUMMARY

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

**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (CEMS)  
SUMMARY REPORT  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, PAGE 2 OF 2)**

**Issuance Date:**

**Expiration Date:**

**CEMS PERFORMANCE SUMMARY**

- 1. CEMS Downtime (Hours) in Reporting Period Due to:
  - a. Monitor Equipment Malfunctions..... \_\_\_\_\_
  - b. Non-Monitor Equipment Malfunctions..... \_\_\_\_\_
  - c. Quality Assurance Calibration..... \_\_\_\_\_
  - d. Other Known Causes..... \_\_\_\_\_
  - e. Unknown Causes..... \_\_\_\_\_Number of incidents of monitor downtime..... \_\_\_\_\_
- 2. Total 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.**

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

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

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

**EXCESS EMISSIONS AND CONTINUOUS MONITORING SYSTEM (CMS)  
PERFORMANCE REPORT AND/OR SUMMARY REPORT FORM (RICE NESHAP)  
COVERED SOURCE PERMIT NO. 0031-04-C  
(Page 1 of 6)**

**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:

(Make Copies for Future Use)

**SECTION I. GENERAL INFORMATION** [63.6650(c)(1), 63.10(e)(vi)(A)]

Company Name	Permit No.	
Street Address		
City	State	ZIP Code
Facility Name		
Facility Street Address (If different than Company Address)		
City	State	ZIP Code

**Report Date and Submittal Reporting Period** [63.6650(c)(3), 63.10(e)(3)(vi)(C), 63.10(e)(3)(vi)(M)]

Reporting period beginning date (mm/dd/yyyy)	Reporting period ending date (mm/dd/yyyy)	Summary report date (mm/dd/yyyy)

**A. Excess Emissions and Operating Limitations/Parameters** [63.6650(c)(5)]

Have any excess emissions or exceedances of an operating limitation/parameter occurred during this reporting period?

Yes  No

If yes, complete the Excess Emissions and Parameter Monitoring Exceedances table **for each period** of excess emissions and/or parameter monitoring exceedances that occurred **during** startups, shutdowns, and/or malfunctions, **or during periods other than** startups, shutdowns, and/or malfunctions.

**B. CMS Performance** [63.6650(c)(6)]

Has a CMS been inoperative (except for zero/low-level and high-level checks) or out of control during this reporting period?

Yes  No

If yes, complete the CMS Performance table **for each period** a CMS was inoperative or out of control.

**Excess Emissions and Continuous Monitoring System (CMS)  
Performance Report and/or Summary Report Form (RICE NESHAP)  
(Page 2 of 6)**

**SECTION II. CERTIFICATION** [63.6650(c)(2), 63.10(e)(3)(vi)(L)]

*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 of Responsible Official (Print or Type)	Title	Date (mm/dd/yy)

Signature of Responsible Official

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**Excess Emissions and Continuous Monitoring System (CMS)  
Performance Report and/or Summary Report Form (RICE NESHAP)  
(Page 5 of 6)**

**SECTION IV. SUMMARY REPORT: GASEOUS EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE**

**A. Process Description and Monitoring Equipment Information**

Unit Name

--

Unit Description [63.6650(e)(9), 63.10(e)(3)(vi)(D)]

--

Emission and/or operating parameter limitations [63.6650(e)(8), 63.10(e)(3)(vi)(E)]

--

Monitoring Equipment Information [63.6650(e)(10), (11); 63.10(e)(3)(vi)(F), (G)]

Type	Latest Certification or Audit Date (mm/dd/yyyy)	Manufacturer	Model	Parameter Monitored

**B. Emission Data Summary** [63.6650(e)(5), (6); 63.10(e)(3)(vi)(I)]

Total duration of excess emissions/parameter exceedances (hours)

--

Total operating time of affected source during the reporting period (days) [63.10(c)(13), 63.10(e)(3)(vi)(H)]

--

Percent of total source operating time during which excess emissions/parameter exceedances occurred (percent)

--

Summary of causes of excess emissions/parameter exceedances (percent of total duration by cause)

Startup/shutdown	%
Control equipment problems	%
Process problems	%
Other known causes	%
Other unknown causes	%
<b>TOTAL</b>	<b>100%</b>

**Excess Emissions and Continuous Monitoring System (CMS)  
Performance Report and/or Summary Report Form (RICE NESHAP)  
(Page 6 of 6)**

**C. CMS Performance Summary** [63.6650(e)(7), 63.10(e)(3)(vi)(J)]

Total duration of CMS downtime (hours)

--

Total operating time of affected source during the reporting period (days) [63.10(c)(13), 63.10(e)(3)(vi)(H)]

--

Percent of total source operating time during which CMS were down (percent)

--

Summary of causes of CMS downtime (percent of downtime by cause)

Monitoring equipment malfunctions	%
Nonmonitoring equipment malfunctions	%
Quality assurance/quality control calibrations	%
Other known causes	%
Other unknown causes	%
<b>TOTAL</b>	<b>100%</b>

**D. CMS, Process, or Control Changes**

Have you made any changes in CMS, processes, or controls since the last reporting period?

Yes  No

If you answered yes, please describe the changes below:

Changes in CMS, processes, or controls since the last reporting period [63.6650(e)(12), 63.10(e)(3)(vi)(K)]

--

**VISIBLE EMISSIONS FORM REQUIREMENTS  
STATE OF HAWAII  
COVERED SOURCE PERMIT NO. 0031-04-C**

**Issuance Date:**

**Expiration Date:**

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

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

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

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

<b>VISIBLE EMISSIONS FORM COVERED SOURCE PERMIT NO. 0031-04-C</b>	
<b>Issuance Date:</b> _____	<b>Expiration Date:</b> _____

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

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

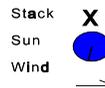
For stacks, describe equipment and fuel: \_\_\_\_\_

For fugitive emissions from crushers and screens, describe:

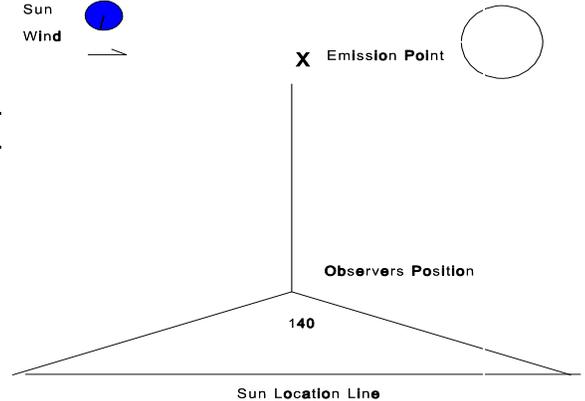
Fugitive emission point: \_\_\_\_\_

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

(During observation)



Draw North Arrow



**Site Conditions:**

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

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

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

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

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

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

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

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

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

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

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

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