

**PROPOSED**

[Issuance Date]

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

07-XXXE CAB  
File No. 0031-04

Mr. Michael P. Ribao  
Manager, Power Supply Department  
Maui Electric Company, Ltd.  
P. O. Box 398  
Kahului, Hawaii 96733

Dear Mr. Ribao:

**Subject: Covered Source Permit (CSP) No. 0031-04-C**  
**Application for Renewal No. 0031-06**  
**Maui Electric Company, Ltd. (MECO)**  
**Palaau Generating Station**  
**Nine (9) Diesel Engine Generators and One (1) Combustion Turbine**  
**Located at: 32A Ulili Street, Kaunakakai, Hawaii (Molokai)**  
**Date of Expiration: [Five Year Period from Issuance Date]**

The subject CSP is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on your application dated May 12, 2006, and its revision dated March 27 and April 3, 2007. A receipt for the application fee of \$3,000.00 is enclosed. This CSP will supersede, in its entirety, the previous CSP No. 0031-04-C dated June 19, 2002, and its amendment dated February 18, 2003.

The CSP is issued subject to the conditions/requirements set forth in the following Attachments:

Attachment I:	Standard Conditions
Attachment IIA:	Special Conditions for Units 3-6
Attachment IIB:	Special Conditions for Units 7-9
Attachment IIC:	Special Conditions for CAT1 & CAT2
Attachment IID:	Special Conditions for CT-1
Attachment II-INSIG	Special Conditions - Insignificant Activities
Attachment III:	Annual Fee Requirements
Attachment IV:	Annual Emissions Reporting Requirements

## PROPOSED

Mr. Michael P. Ribao  
[Issuance Date]  
Page 2

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

Annual Emissions Report Form:	Diesel Engine Generators
Annual Emissions/Monitoring Report Form:	Fuel Consumption
Monitoring Report Forms:	Fuel Certification; Spec Used Oil; FITR Certification; and Visible Emissions
Excess Emissions and Monitoring System Performance Summary Report Compliance Certification 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, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,

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

CBS:jhm

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 of Health, 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 of Health.  
  
(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the U.S. Environmental Protection Agency (EPA), Region 9.  
  
(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.  
  
(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
- d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
- e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)<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 Health of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:**
- a. Identification of each affected emission point and each emission limit exceeded;
  - b. Magnitude of each excess emission;
  - c. Time and duration of each excess emission;
  - d. Identity of the process or control equipment causing the excess emission;
  - e. Cause and nature of each excess emission;
  - f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
  - g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
  - h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

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

(Auth.: HAR §11-60.1-16; SIP §11-60-16)<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 of Health may extend the time periods specified in Standard Condition No. 19 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department of Health.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-101, 40 CFR §70.5(a)(1)(iii))<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 of Health and the U.S. EPA Region 9 once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

---

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

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

**ATTACHMENT IIA: SPECIAL CONDITIONS FOR UNITS 3-6  
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 equipments:

<u>Unit Nos.</u>	<u>Description</u>
3,4,6	1 MW Cummins diesel engine generators (DEGs) (model no. KTA50, serial nos. 33112906, 33108992, and 33120964), 9.09 MMBtu/hr; and
5	1 MW Cummins DEG (model no. KTTA50, serial no. 33110779), 9.52 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)

**Section B. Operational and Emission Limitations**

1. Fuel Specifications

- a. Units 3-6 shall be fired only on fuel oil no. 2 with a maximum sulfur content not to exceed 0.4 percent by weight, alternative fuels allowed in Attachment IIA, Special Condition Nos. B.5 and B.6.a.1), or any combination thereof.
- b. The combined fuel consumption of Units 3-6 shall not exceed 1,650,000 gallons in any rolling 12-month period.
- c. Fuel additives (that do not increase emissions) may be used to reduce corrosion, control biological growth, enhance combustion, etc.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

2. Opacity

Units 3-6 shall not exhibit visible emissions of twenty (20) percent opacity or greater for any six (6) minute averaging period, except as follows. During start-up, shut-down, or equipment breakdown, Units 3-6 may exhibit visible emissions greater than twenty (20) but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, SIP §11 60-24)<sup>2</sup>

3. Maximum Emission Limits

The permittee shall not discharge or cause the discharge of nitrogen oxides (as NO<sub>2</sub>) into the atmosphere from each DEG in excess of the following specified limits:

DEG Unit No.	Maximum Emission Limit (3-hour Average)	
	(lbs/hr)	(ppmvd @ 15 percent O <sub>2</sub> )
3, 4, 6	19.51	583
5	19.39	520

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

4. Air Pollution Control

- a. For Units 3, 4, and 6, the permittee shall operate and maintain a fuel injection timing retard (FITR) of 4.5° from initial factory settings, equivalent to a push rod travel of 0.148 inch, to meet the emission limits as specified in Special Condition No. B.3.
- b. For Unit 5, the permittee shall operate and maintain a FITR of 7.5° from initial factory settings, equivalent to a push rod travel of 0.161 inch, to meet the emission limit as specified in Attachment IIA, Special Condition No. B.3.
- c. 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 of Health (DOH) to reflect state or federal promulgated rules on used oil.
- b. This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing and burning of used oil.
- c. Used oil shall be obtained only from collected used oil, such as waste oil, lubricating oil, waste diesel oil, crank-case oil, transformer oil, kerosene, and solvents obtained from the equipment operating at the MECO facilities. The used oil may be burned by Units 3-6 in accordance with the procedures specified in this permit. Used oil may also be obtained from other sources, provided a written notification identifying the new source is submitted to the DOH, and approved, prior to the acceptance of the used oil.
- d. The total amount of spec used oil fired in Units 3-6 and 7-9 (in Attachment IIB), shall not exceed 10,000 gallons in any rolling twelve (12) month period.
- e. Samples of the used oil generated from MECO facilities shall be taken from the holding tank or drums, and composited and analyzed for compliance with the limits in Attachment IIA, Special Condition No. B.5.i, prior to being burned. The samples shall be taken in such a manner that the composite sample obtained is representative of **all** the used oil generated by the facility for that period of time. The composite sample shall represent no more than 400 gallons of spec used oil or all of the oil collected in any six (6) month period, whichever is less.
- f. Each composite sample shall be submitted in a timely manner to a qualified laboratory and an analysis report shall be obtained for the constituents/properties for which limits are given in Attachment IIA, Special Condition No. B.5.i.
- g. 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 a hazardous waste.
- h. An analysis report shall be obtained for the constituents/properties for which limits are given in Special Condition No. B.5.i for each delivery of spec used oil.

- i. The following constituents/properties of the specification used oil shall not exceed the specified limits listed below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Sulfur	0.75% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	<2 ppm

- j. Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Special Condition No. B.5.i is allowable only for spec used oil that were not deemed hazardous.

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

## 6. Alternate Operating Scenarios

- a. Terms and conditions for reasonably anticipated operating scenarios identified by the permittee in the covered source permit application and approved by the DOH are as follows:
- 1) The first alternate operating scenario is the ability to switch to alternate fuels. The permittee shall not be allowed to switch fuels unless all of the following information is provided, in writing, and approved by the DOH:
    - a) Specific type of fuel provided;
    - b) Consumption rate of the fuel;
    - c) Fuel blending rate;
    - d) Calculations showing no increase in emissions;
    - e) Ambient air quality analyses verifying that State and Federal Ambient Air Quality Standards (SAAQS and NAAQS) will be met;
    - f) Fuel storage; and
    - g) Plan to monitor and record the fuel analyses and consumption.

- 2) A second alternate operating scenario involves the replacement of the DEG(s) in the event of failure or a major overhaul of the installed unit. The permittee may replace the DEG(s) with a temporary replacement unit if any repair work reasonably warrants the removal (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) of the DEG(s) from its site and the following provisions are adhered to:
  - a) Written notification identifying the reasons for the replacement DEG(s) from the site of operation is submitted to and approved by the DOH prior to the installation;
  - b) The DEG(s) is replaced with a temporary replacement DEG(s) with equal or less emissions and similar stack parameters;
  - c) The temporary replacement unit complies with all applicable conditions including all operating restrictions and emission limits;
  - d) The DEG(s) shall be repaired and returned to service at the same location in a timely manner; and
  - e) Prior to the removal and return of any DEG(s), the permittee shall submit to the DOH written documentation on the removal and return dates and on the make, size, model and serial numbers for both the temporary replacement unit and installed unit.
- b. 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 and, if required by any applicable requirement or the DOH, submit written notification to the DOH.
- c. The terms and conditions under each alternative operating scenario shall meet all applicable requirements including conditions of this permit.

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

**Section C. Monitoring and Recordkeeping Requirements**

1. Fuel Monitoring

The permittee shall, at its own expense, operate and maintain a non-resetting fuel meter on the DEG(s) for the permanent recording of the total fuel usage for Units 3-6. Monthly records shall be kept of the ending meter readings and the total fuel usage. Monthly fuel summaries shall include the monthly total fuel usage and the total fuel used based on a 12-month rolling basis.

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

2. Total Fuel Usage and Specification

Fuel delivery receipts shall be maintained, showing the supplier, fuel type, sulfur content (percent by weight), date of delivery, and amount (in gallons) of fuel delivered to the facility for subsequent transfer to the DEGs covered under this permit.

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

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the DEGs. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

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

4. FITR

The permittee shall conduct **semi-annual** (calendar year) visual inspections and/or maintenance for each equipment subject to NO<sub>x</sub> limits and FITR settings. As a minimum, these records shall include: the date of inspection; the name and title of the inspector; the FITR setting (in degrees) inspected; the FITR setting as adjusted; and brief comments on any corrective actions taken.

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

5. Visible Emissions (V.E.)

a. Except when annual V.E. observations are conducted, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

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

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

## 6. Records

All records, including support information, shall be maintained for **at least five (5) years** following 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 in a permanent form suitable for inspection and made available to the DOH or their representative upon request.

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

## **Section D. Notification and Reporting Requirements**

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16 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; 40 CFR §60.48c(a); SIP §11-60-10, §11-60-16)<sup>1,2</sup>

## 2. Deviations

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

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

3. Monitoring

The permittee shall submit **semi-annually**, the attached *Annual Emissions/Monitoring Report Form: Fuel Consumption*; and *Monitoring Report Forms: Fuel Certification; Spec Used Oil; FITR Certification*; and *Visible Emissions* to the DOH. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

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

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

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

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

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

5. Annual Emissions

- a. 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/yr 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 completion and submittal of *Annual Emissions/Monitoring Report Form: Fuel Consumption*, shall be used in reporting fuel usage.
- b. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the DOH 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)

**Section E. Testing Requirements**

1. On an annual basis or at other such times as may be specified by the DOH, the permittee shall conduct or cause to be conducted performance tests for nitrogen oxides (as NO<sub>2</sub>) on Unit 3-6. The following test methods (referenced in Appendix A of 40 CFR, Part 60.8) or U.S. EPA-approved equivalent methods shall be used:

- a. Method 7E for concentration of nitrogen oxides (as NO<sub>2</sub>);
- b. Method 1 for sample and velocity traverse;
- c. Method 2 for velocity and volumetric flow rate;
- d. Method 3 or 3a for gas analysis; and
- e. Method 4 for moisture content.

Method 19 may be used in lieu of Methods 1-4.

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

2. Note that Method 1 cannot be used under the following conditions:

- a. Cyclonic or swirling gas flow at the sampling location;
- b. Stack or duct with a diameter less than 12 inches or a cross-sectional area less than 113 square inches; or
- c. Sampling location less than two stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR 60, App. A, Meth. 1)<sup>1</sup>

3. The performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

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

4. The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the maximum expected operating capacity of the DEGs and the DOH may monitor the tests.

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

5. **At least 30 calendar days prior to performing a test**, the permittee shall submit a written performance test plan to the DOH and U.S. EPA Region 9 that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the DOH may be grounds to invalidate any test and require a retest.

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

6. **Within sixty (60) days after completion of the performance test**, the permittee shall submit to the DOH and U.S. EPA Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

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

7. 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 DOH before the tests.

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

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

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

**Section F. Agency Notification**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

<sup>1</sup> The citation to the Code of Federal Regulations (CFR) identified under a particular condition, indicates 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 citation to the State Implementation Plan (SIP) identified under a particular condition, indicates that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIB: SPECIAL CONDITIONS FOR UNITS 7-9  
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 equipments:

<u>Unit Nos.</u>	<u>Description</u>
7,8,9	2.2 MW Caterpillar DEGs (model no. 3608, serial nos. 6MC00452, 6MC00453, and 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)

**Section B. Operational and Emission Limitations**

1. Fuel Specifications

- a. Units 7-9 shall be fired only on fuel oil no. 2 with a maximum sulfur content not to exceed 0.4 percent by weight, alternative fuels allowed in Attachment IIB, Special Condition Nos. B.6 and B.7.a.1), or any combination thereof.

- b. Fuel additives (that do not increase emissions) may be used to reduce corrosion, control biological growth, enhance combustion, etc.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

2. The permittee shall not operate Units 7-9 below twenty five (25) percent of rated load, except during equipment start-up, shut-down, maintenance, or testing.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. Opacity

Units 7-9 shall not exhibit visible emissions of twenty (20) percent opacity or greater for any six (6) minute averaging period, except as follows. During start-up, shut-down, or equipment breakdown, Units 7-9 may exhibit visible emissions greater than twenty (20) but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, SIP §11 60-24)<sup>2</sup>

4. Maximum Emission Limits

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 each DEG in excess of the following specified limits:

DEG Units 7-9	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

Note:

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

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

5. Air Pollution Control

- a. For Units 7, 8, and 9, the permittee shall operate and maintain a fuel injection timing retard (FITR) of 9° from initial factory settings to meet the emission limits as specified in Attachment IIB, Special Condition No. B.4.
- b. The permittee shall use intake air cooling, good combustion practices, and high combustion efficiency.

- c. The use of an alternative control system(s) other than those specified above is contingent upon receiving written approval from the DOH 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)

6. Specification (Spec) Used Oil

- a. The permit conditions prescribed herein may be revised at any time by the DOH to reflect state or federal promulgated rules on used oil.
- b. This permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing and burning of used oil.
- c. Used oil shall be obtained only from collected used oil, such as waste oil, lubricating oil, waste diesel oil, crank-case oil, transformer oil, kerosene, and solvents obtained from the equipment operating at the MECO facilities. The used oil may be burned by Units 7-9 in accordance with the procedures specified in this permit. Used oil may also be obtained from other sources, provided a written notification identifying the new source is submitted to the DOH, and approved, prior to the acceptance of the used oil.
- d. The total amount of spec used oil fired in Units 7-9 and 3-6 (in Attachment IIA), shall not exceed 10,000 gallons in any rolling twelve (12) month period.
- e. Samples of the used oil generated from MECO facilities shall be taken from the holding tank or drums, and composited and analyzed for compliance with the limits in Attachment IIB, Special Condition No. B.6.i, prior to being burned. The samples shall be taken in such a manner that the composite sample obtained is representative of **all** the used oil generated by the facility for that period of time. The composite sample shall represent no more than 400 gallons of spec used oil or all of the oil collected in any six (6) month period, whichever is less.
- f. Each composite sample shall be submitted in a timely manner to a qualified laboratory and an analysis report shall be obtained for the constituents/properties for which limits are given in Attachment IIB, Special Condition No. B.6.i.

- g. 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 a hazardous waste.
- h. An analysis report shall be obtained for the constituents/properties for which limits are given in Attachment IIB, Special Condition No. B.6.i, for each delivery of spec used oil.
- i. The following constituents/properties of the specification used oil shall not exceed the specified limits listed below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Sulfur	0.75% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)	<2 ppm

- j. Should the results of any used oil analyses deem the sample to be hazardous, the contaminated containers shall be identified and isolated from the non-contaminated containers and properly disposed. Fuel blending to meet the constituents/properties limits given in Attachment IIB, Special Condition No. B.6.i, is allowable only for spec used oil that were not deemed hazardous.

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

## 7. Alternate Operating Scenarios

- a. Terms and conditions for reasonably anticipated operating scenarios identified by the permittee in the covered source permit application and approved by the DOH are as follows:
  - 1) The first alternate operating scenario is the ability to switch to alternate fuels. The permittee shall not be allowed to switch fuels unless all of the following information is provided, in writing, and approved by the DOH:
    - a) Specific type of fuel provided;
    - b) Consumption rate of the fuel;
    - c) Fuel blending rate;
    - d) Calculations showing no increase in emissions;
    - e) Ambient air quality analyses verifying that State Ambient Air Quality Standards (SAAQS) will be met;
    - f) Fuel storage; and

- g) Plan to monitor and record the fuel analyses and consumption.
- 2) A second alternate operating scenario involves the replacement of the DEG(s) in the event of failure or a major overhaul of the installed unit. The permittee may replace the DEG(s) with a temporary replacement unit if any repair work reasonably warrants the removal (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) of the DEG(s) from its site and the following provisions are adhered to:
  - a) Written notification identifying the reasons for the replacement DEG(s) from the site of operation is submitted to and approved by the DOH prior to the installation;
  - b) The DEG(s) is replaced with a temporary replacement DEG(s) with equal or less emissions and similar stack parameters;
  - c) The temporary replacement unit complies with all applicable conditions including all operating restrictions and emission limits;
  - d) The DEG(s) shall be repaired and returned to service at the same location in a timely manner; and
  - e) Prior to the removal and return of any DEG(s), the permittee shall submit to the DOH written documentation on the removal and return dates and on the make, size, model and serial numbers for both the temporary replacement unit and installed unit.
- b. 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 and, if required by any applicable requirement or the DOH, submit written notification to the DOH.
- c. The terms and conditions under each alternative operating scenario shall meet all applicable requirements including conditions of this permit.

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

**Section C. Monitoring and Recordkeeping Requirements**

1. Fuel Monitoring

The permittee shall, at its own expense, operate and maintain a non-resetting fuel meter on the DEG(s) for the permanent recording of the spec used oil usage for Units 3-9. Monthly records shall be kept of the ending meter readings and the total fuel usage. Monthly fuel summaries shall include the monthly total fuel usage and the total fuel used based on a 12-month rolling basis.

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

2. Total Fuel Usage and Specification

Fuel delivery receipts shall be maintained, showing the supplier, fuel type, sulfur content (percent by weight), date of delivery, and amount (in gallons) of fuel delivered to the facility for subsequent transfer to the DEGs covered under this permit.

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

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the DEGs. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

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

4. FITR

The permittee shall conduct **semi-annual** (calendar year) visual inspections and/or maintenance for each equipment subject to NO<sub>x</sub> limits and FITR settings. As a minimum, these records shall include: the date of inspection; the name and title of the inspector; the FITR setting (in degrees) inspected; the FITR setting as adjusted; and brief comments on any corrective actions taken.

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

5. Visible Emissions (V.E.)

a. Except when annual V.E. observations are conducted, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

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

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

**CSP No. 0031-04-C**  
**Attachment IIB**  
**Page 8 of 13**  
**[Issuance Date]**  
**[Expiration Date]**

**PROPOSED**

6. The permittee shall continuously monitor and record the operating load for each of the Units 7-9. At a minimum, a load reading shall be taken for each unit for each hour. Start-up, shut-down, maintenance, or testing periods shall be identified.

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

7. Continuous Emission Monitoring Systems (CEMS)

The permittee shall operate, maintain, and calibrate CEMS at each of the Units 7-9 exhaust streams to measure NO<sub>x</sub> (as NO<sub>2</sub>) and CO<sub>2</sub> or O<sub>2</sub> concentrations in the flue gas as follows:

- a. Each 1-hour average for NO<sub>x</sub> shall be corrected to 15 percent O<sub>2</sub> on an hourly basis using the 1-hour average of the O<sub>2</sub> CEMS data.
- b. The 1-hour averages for NO<sub>x</sub> shall be expressed in parts per million by volume dry basis (ppmvd) and pounds per hour (lb/hr).
- c. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS.
- d. The CEMS shall also be operated according to Performance Specification 2 in 40 CFR Part 60, Appendix B and shall follow the procedures and methods specified as follows:
  - 1) A single emission monitoring system operating sequentially to measure individual emissions from Units 7-9 is acceptable.
  - 2) The monitoring system shall complete a minimum of one (1) monitoring cycle (sampling, analyzing, and data recording) for each successive 15-minute period. When sampling from a DEG that is not in operation, the sampling train shall receive clean air. The data collection system shall determine the hourly emission rate for each DEG using the 15-minute sample analyzed.
  - 3) During each relative accuracy test audit (RATA) of the CEMS, NO<sub>x</sub> and O<sub>2</sub>, data shall be collected concurrently (or within a 30 to 60-minute period) by both the CEMS and test methods as follows:
    - a) For NO<sub>x</sub>, EPA Reference Method 7 shall be used.
    - b) For O<sub>2</sub>, EPA Reference Method 3B shall be used.  
CO<sub>2</sub> or O<sub>2</sub> data shall be collected concurrently with each NO<sub>x</sub> data collection.

e. 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 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>

8. Records

All records, including support information, shall be maintained for **at least five (5) years** following 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 in a permanent form suitable for inspection and made available to the DOH or their representative upon request.

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

**Section D. Notification and Reporting Requirements**

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16 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; 40 CFR §60.48c(a); SIP §11-60-10, §11-60-16)<sup>1,2</sup>

2. Deviations

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

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

3. Monitoring

The permittee shall submit **semi-annually**, the attached *Annual Emissions/Monitoring Report Form: Fuel Consumption*; and *Monitoring Report Forms: Fuel Certification; Spec Used Oil; FITR Certification*; and *Visible Emissions* to the DOH. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

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

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

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

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

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

5. Annual Emissions

- a. 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/yr 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 completion and submittal of *Annual Emissions/Monitoring Report Form: Fuel Consumption*, shall be used in reporting fuel usage.
- b. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the DOH 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)

6. Excess Emissions

The permittee shall submit a semi-annual report (submitted by August 1 and February 1, respectively) of all excess emissions of NO<sub>x</sub> (as NO<sub>2</sub>) to the DOH and U.S. EPA Region 9. The report shall include the following:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any concurrent data, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and corrective actions taken.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR 60.13(h))<sup>1</sup>

- b. Specific identification of each period of excess emissions that occurs during start-ups, shut-downs, and malfunctions of the DEG(s). The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted, shall also be reported.

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

- c. The date and time identifying each period during which CEMS was inoperable except for zero and span checks. The nature of each system repair or adjustment shall be described.

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

- d. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the CEMS operated properly during the period and was not subject to any repairs or adjustments except for zero and span checks.

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

- e. 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 IIB, Special Condition No. B.4.

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

- f. The enclosed Excess Emissions and Monitoring System Performance Summary Report form shall be used in conjunction with the reporting of excess emissions.

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

### **Section E. Testing Requirements**

1. On an annual basis or at other such times as may be specified by the DOH, the permittee shall conduct or cause to be conducted performance tests for particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (as NO<sub>2</sub>), carbon dioxide (CO), and volatile organic compounds (VOC) on Units 7-9. The following test methods (referenced in Appendix A of 40 CFR, Part 60.8) or U.S. EPA-approved equivalent methods shall be used:

- a. Methods 1-4 and 5 for the emissions of PM;
- b. Methods 1-4 and 6C for the emissions of SO<sub>2</sub>;
- c. Methods 1-4 and 7E for the emissions of NO<sub>x</sub>;
- d. Methods 1-4 and 10 for the emissions of CO; and
- e. Methods 1-4 and 25A, for the emissions of VOC (Method 18 may be used in addition to 25A).

Method 19 may be used in lieu of Methods 1-4.

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

2. Note that Method 1 cannot be used under the following conditions:

- a. Cyclonic or swirling gas flow at the sampling location;
- b. Stack or duct with a diameter less than 12 inches or a cross-sectional area less than 113 square inches; or
- c. Sampling location less than two stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR 60, App. A, Meth. 1)<sup>1</sup>

3. The performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

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

4. The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the maximum expected operating capacity of the DEGs and the DOH may monitor the tests.

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

5. **At least 30 calendar days prior to performing a test**, the permittee shall submit a written performance test plan to the DOH and U.S. EPA Region 9 that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the DOH may be grounds to invalidate any test and require a retest.

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

6. **Within sixty (60) days after completion of the performance test**, the permittee shall submit to the DOH and U.S. EPA Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

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

7. 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 DOH before the tests.

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

8. Upon written request and justification by the permittee, the DOH may waive the requirement for a specific annual source test. The waiver request is to be submitted prior to the required test and must include **documentation** justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating

**CSP No. 0031-04-C**  
**Attachment IIB**  
**Page 15 of 13**  
**[Issuance Date]**  
**[Expiration Date]**

**PROPOSED**

compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

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

**Section F. Agency Notification**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

<sup>1</sup> The citation to the Code of Federal Regulations (CFR) identified under a particular condition, indicates 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 citation to the State Implementation Plan (SIP) identified under a particular condition, indicates that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT IIC: SPECIAL CONDITIONS FOR CAT1 & CAT2  
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 equipments:

<u>Unit Nos.</u>	<u>Description</u>
CAT1,CAT2	1.25 MW Caterpillar diesel engine generators (DEGs) (model no. 3516, serial nos. 25Z00574, 25Z00575), 12.62 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)

**Section B. Operational and Emission Limitations**

1. Fuel Specifications

CAT1 and CAT2 shall be fired only on fuel oil no. 2 with a maximum sulfur content not to exceed 0.4 percent by weight, alternative fuels allowed in Attachment IIC, Special Condition No. B.5.a.1), or any combination thereof.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

2. Opacity

CAT1 and CAT2 shall not exhibit visible emissions of twenty (20) percent opacity or greater for any six (6) minute averaging period, except as follows: during start-up, shut-down, or equipment breakdown, CAT1 and CAT2 may exhibit visible emissions greater than twenty (20) but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, SIP §11 60-24)<sup>2</sup>

3. Maximum Emission Limits

The permittee shall not discharge or cause the discharge of nitrogen oxides (as NO<sub>2</sub>) into the atmosphere from each DEG in excess of the following specified limits:

DEG Unit Nos. CAT1, CAT2	Maximum Emission Limit (3-hour Average)	
	(lbs/hr)	(ppmvd @ 15 percent O <sub>2</sub> )
Nitrogen Oxides (as NO <sub>2</sub> )	27.10	550

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

4. Air Pollution Control

- a. For CAT1 and CAT2, the permittee shall operate and maintain a fuel injection timing retard (FITR) of 5° from initial factory settings to meet the emission limits as specified in Attachment IIC, Special Condition No. B.3.
- b. The use of an alternative control system(s) other than those specified above is contingent upon receiving written approval from the DOH 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. Alternate Operating Scenarios

- a. Terms and conditions for reasonably anticipated operating scenarios identified by the permittee in the covered source permit application and approved by the DOH are as follows:
  - 1) The first alternate operating scenario is the ability to switch to alternate fuels. The permittee shall not be allowed to switch fuels unless all of the following information is provided, in writing, and approved by the DOH:
    - a) Specific type of fuel provided;
    - b) Consumption rate of the fuel;
    - c) Fuel blending rate;
    - d) Calculations showing no increase in emissions;
    - e) Ambient air quality analyses verifying that State Ambient Air Quality Standards (SAAQS) will be met;
    - f) Fuel storage; and
    - g) Plan to monitor and record the fuel analyses and consumption.

- 2) A second alternate operating scenario involves the replacement of the DEG(s) in the event of failure or a major overhaul of the installed unit. The permittee may replace the DEG(s) with a temporary replacement unit if any repair work reasonably warrants the removal (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) of the DEG(s) from its site and the following provisions are adhered to:
- a) Written notification identifying the reasons for the replacement DEG(s) from the site of operation is submitted to and approved by the DOH prior to the installation;
  - b) The DEG(s) is replaced with a temporary replacement DEG(s) with equal or less emissions and similar stack parameters;
  - c) The temporary replacement unit complies with all applicable conditions including all operating restrictions and emission limits;
  - d) The DEG(s) shall be repaired and returned to service at the same location in a timely manner; and
  - e) Prior to the removal and return of any DEG(s), the permittee shall submit to the DOH written documentation on the removal and return dates and on the make, size, model and serial numbers for both the temporary replacement unit and installed unit.
- b. 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 and, if required by any applicable requirement or the DOH, submit written notification to the DOH.
- c. The terms and conditions under each alternative operating scenario shall meet all applicable requirements including conditions of this permit.

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

**Section C. Monitoring and Recordkeeping Requirements**

1. Total Fuel Usage and Specification

Fuel delivery receipts shall be maintained, showing the supplier, fuel type, sulfur content (percent by weight), date of delivery, and amount (in gallons) of fuel delivered to the facility for subsequent transfer to the DEGs covered under this permit.

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

2. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the DEGs. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

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

3. FITR

The permittee shall conduct **semi-annual** (calendar year) visual inspections and/or maintenance for each equipment subject to NO<sub>x</sub> limits and FITR settings. As a minimum, these records shall include: the date of inspection; the name and title of the inspector; the FITR setting (in degrees) inspected; the FITR setting as adjusted; and brief comments on any corrective actions taken.

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

4. Visible Emissions (V.E.)

- a. Except when annual V.E. observations are conducted, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification by the permittee, the DOH may waive the requirement for a specific annual V.E. observation. The waiver request is to be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

**CSP No. 0031-04-C**  
**Attachment IIC**  
**Page 5 of 8**  
**[Issuance Date]**  
**[Expiration Date]**

**PROPOSED**

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

5. Records

All records, including support information, shall be maintained for **at least five (5) years** following 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 in a permanent form suitable for inspection and made available to the DOH or their representative upon request.

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

**Section D. Notification and Reporting Requirements**

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16 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; 40 CFR §60.48c(a); SIP §11-60-10, §11-60-16)<sup>1,2</sup>

2. Deviations

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

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

3. Monitoring

The permittee shall submit **semi-annually**, the attached *Monitoring Report Forms: Fuel Certification; FITR Certification; and Visible Emissions* to the DOH. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

- a. During the permit term, the permittee shall submit at least **annually** to the DOH and U.S. EPA Region 9, *Compliance Certification Form* pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include at a minimum the following information:
- 1) The identification of each term or condition of the permit that is the basis of the certification;
  - 2) The compliance status;
  - 3) Whether compliance was continuous or intermittent;
  - 4) The methods used for determining the compliance status of the source currently and over the reporting period;
  - 5) Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
  - 6) Any additional information as required by the DOH including information to determine compliance.
- b. *The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by a responsible official.*
- c. *Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the DOH determines that reasonable justification exists for the extension.*

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

5. Annual Emissions

- a. 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/yr 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 completion and submittal of *Annual Emissions Report Form: Diesel Engine Generators*, shall be used in reporting fuel usage.

- b. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the DOH 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)

### **Section E. Testing Requirements**

1. On an annual basis or at other such times as may be specified by the DOH, the permittee shall conduct or cause to be conducted performance tests for nitrogen oxides (as NO<sub>2</sub>) on CAT1 and CAT2. The following test methods (referenced in Appendix A of 40 CFR, Part 60.8) or U.S. EPA-approved equivalent methods shall be used:
  - a. Method 7E for concentration of nitrogen oxides (as NO<sub>2</sub>);
  - b. Method 1 for sample and velocity traverse;
  - c. Method 2 for velocity and volumetric flow rate;
  - d. Method 3 or 3a for gas analysis; and
  - e. Method 4 for moisture content.

Method 19 may be used in lieu of Methods 1-4.

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

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

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR 60, App. A, Meth. 1)<sup>1</sup>

3. The performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

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

4. The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the maximum expected operating capacity of the DEGs and the DOH may monitor the tests.

**CSP No. 0031-04-C**  
**Attachment IIC**  
**Page 9 of 8**  
**[Issuance Date]**  
**[Expiration Date]**

**PROPOSED**

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

5. **At least 30 calendar days prior to performing a test**, the permittee shall submit a written performance test plan to the DOH and U.S. EPA Region 9 that describes the test date(s), duration, locations, test methods, source operation, fuel consumption, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the DOH may be grounds to invalidate any test and require a retest.

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

6. **Within sixty (60) days after completion of the performance test**, the permittee shall submit to the DOH and U.S. EPA Region 9, the test report which shall include the operating conditions of the equipment at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

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

7. 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 DOH before the tests.

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

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

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

#### **Section F. Agency Notification**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

<sup>1</sup> The citation to the Code of Federal Regulations (CFR) identified under a particular condition, indicates 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.

**CSP No. 0031-04-C**  
**Attachment IIC**  
**Page 11 of 8**  
**[Issuance Date]**  
**[Expiration Date]**

**PROPOSED**

2

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

**ATTACHMENT IID: SPECIAL CONDITIONS FOR CT-1  
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 equipments:

<u>Unit No.</u>	<u>Description</u>
CT-1	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)

**Section B. Applicable Federal Regulations**

1. CT-1 is subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A - General Provisions; 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 Part 60)<sup>1</sup>2.

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

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

**Section C. Operational and Emission Limitations**

1. Minimum Operating Load

The minimum CT-1 load shall not be less than 25% of the rated capacity at any one time, except during CT-1 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. CT-1 shall be fired only on fuel oil no. 2 with a maximum sulfur content not to exceed 0.4 percent by weight, alternative fuels allowed in Attachment IID, Special Condition No. C.4.a.1), or any combination thereof.

b. The total fuel consumption of CT-1 shall not exceed 1,230,000 gallons in any rolling 12-month period.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

3. Opacity

CT-1 shall not exhibit visible emissions of twenty (20) percent opacity or greater for any six (6) minute averaging period, except as follows: during start-up, shut-down, or equipment breakdown, CT-1 may exhibit visible emissions greater than twenty (20) but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §11-60.1-90, SIP §11 60-24)<sup>2</sup>

4. Alternate Operating Scenarios

a. Terms and conditions for reasonably anticipated operating scenarios identified by the permittee in the covered source permit application and approved by the DOH are as follows:

1) The first alternate operating scenario is the ability to switch to alternate fuels. The permittee shall not be allowed to switch fuels unless all of the following information is provided, in writing, and approved by the DOH:

- a) Specific type of fuel provided;
- b) Consumption rate of the fuel;
- c) Fuel blending rate;

CSP No. 0031-04-C  
Attachment IID  
Page 3 of 7  
[Issuance Date]  
[Expiration Date]

**PROPOSED**

d) Calculations showing no increase in emissions;

- e) Ambient air quality analyses verifying that State Ambient Air Quality Standards (SAAQS) will be met;
  - f) Fuel storage; and
  - g) Plan to monitor and record the fuel analyses and consumption.
- 2) A second alternate operating scenario involves the replacement of the CT in the event of failure or a major overhaul of the installed unit. The permittee may replace the CT-1 with a temporary replacement unit if any repair work reasonably warrants the removal (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation) of the CT-1 from its site and the following provisions are adhered to:
- a) Written notification identifying the reasons for the replacement CT from the site of operation is submitted to and approved by the DOH prior to the installation;
  - b) The CT is replaced with a temporary replacement CT with equal or less emissions and similar stack parameters;
  - c) The temporary replacement unit complies with all applicable conditions including all operating restrictions and emission limits;
  - d) The CT shall be repaired and returned to service at the same location in a timely manner; and
  - e) Prior to the removal and return of any CT, the permittee shall submit to the DOH written documentation on the removal and return dates and on the make, size, model and serial numbers for both the temporary replacement unit and installed unit.
- b. 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 and, if required by any applicable requirement or the DOH, submit written notification to the DOH.
- c. The terms and conditions under each alternative operating scenario shall meet all applicable requirements including 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. Fuel Monitoring**

The permittee shall, at its own expense, operate and maintain a non-resetting fuel meter on CT-1 for the permanent recording of the total fuel usage for CT-1. Monthly records shall be kept of the beginning meter readings and the total fuel usage. Monthly fuel summaries

shall include the monthly total fuel usage and the total fuel used based on a 12-month rolling basis.

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

2. Total Fuel Usage and Specification

Fuel delivery receipts shall be maintained, showing the supplier, fuel type, sulfur content (percent by weight), date of delivery, and amount (in gallons) of fuel delivered to the facility for subsequent transfer to CT-1 covered under this permit.

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

3. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on CT-1. At a minimum, these records shall include: the date of the inspection; name and title of the inspector; a short description of the action and/or any such repair work; and a description of the part(s) inspected or repaired.

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

4. Visible Emissions (V.E.)

a. Except when annual V.E. observations are conducted, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. For the monthly observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with Method 9. For the annual observation for each equipment, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

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

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

5. Records

All records, including support information, shall be maintained for **at least five (5) years** following 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 in a permanent form suitable for inspection and made available to the DOH or their representative upon request.

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

**Section E. Notification and Reporting Requirements**

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16 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; 40 CFR §60.48c(a); SIP §11-60-10, §11-60-16)<sup>1,2</sup>

2. Deviations

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

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

3. Monitoring

The permittee shall submit **semi-annually**, the attached *Annual Emissions/Monitoring Report Form: Fuel Consumption*; and *Monitoring Report Forms: Fuel Certification*; and *Visible Emissions* to the DOH. These reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period** (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Compliance Certification

- a. During the permit term, the permittee shall submit at least **annually** to the DOH and U.S. EPA Region 9, *Compliance Certification Form* pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include at a minimum the following information:
- 1) The identification of each term or condition of the permit that is the basis of the certification;
  - 2) The compliance status;
  - 3) Whether compliance was continuous or intermittent;
  - 4) The methods used for determining the compliance status of the source currently and over the reporting period;
  - 5) Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
  - 6) Any additional information as required by the DOH including information to determine compliance.
- b. *The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by a responsible official.*
- c. *Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the DOH determines that reasonable justification exists for the extension.*

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

5. Annual Emissions

- a. 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/yr 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 completion and submittal of *Annual Emissions/Monitoring Report Form: Fuel Consumption*, shall be used in reporting fuel usage.

- b. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the DOH 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)

**Section F. Agency Notification**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

<sup>1</sup> The citation to the Code of Federal Regulations (CFR) identified under a particular condition, indicates 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 citation to the State Implementation Plan (SIP) identified under a particular condition, indicates 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 of Health may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

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

**Section C. Monitoring and Recordkeeping Requirements**

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

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

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

**Section D. Notification and Reporting**

Compliance Certification

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

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

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

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

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

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

CSP No. 0031-04-C  
Attachment II - INSIG  
Page 3 of 3  
[Issuance Date]  
[Expiration Date]

**PROPOSED**

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

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

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS  
COVERED SOURCE PERMIT NO. 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:  
***Annual Emissions Report Form: Diesel Engine Generators*** for DEGs 7-9 and CAT1 & CAT2; and  
***Annual Emissions/Monitoring Report Form: Fuel Consumption*** for DEGs 3-6 and CT-1.
2. The annual reporting period shall be from January 1 to December 31 of each year. Annual reports shall be submitted to the Department of Health within sixty (60) days after the end of each calendar year. All reports shall be mailed to the following address:

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

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information by submitting a written request to the Department of Health and clearly identifying the specific information that is to be accorded confidential treatment.

**PROPOSED**

**ANNUAL EMISSIONS REPORT FORM  
DIESEL ENGINE GENERATORS  
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.

(Make Copies for Future Use)

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

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

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

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

Serial/ID No.: \_\_\_\_\_

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

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

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

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

Equipment <sup>1</sup>	Type of Fuel Fired <sup>2</sup>	Fuel Usage (gal/yr)	% Sulfur Content by Weight	Notes

<sup>1</sup> Equipment: List all diesel engine generators that operated during this period.

<sup>2</sup> Types of Fuel:     • Residual Oil: Specify Grade, No. 6, 5, or 4;                     • Liquefied Petroleum Gas, Butane or Propane;  
                           • Distillate Oil (No. 2);   • If Other, specify.

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

**PROPOSED**

**ANNUAL EMISSIONS/MONITORING REPORT FORM  
FUEL CONSUMPTION  
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 Period: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

Equipment Description: DEG Units 3-6

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

Serial/ID No.: \_\_\_\_\_

Type of Fuel: \_\_\_\_\_

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

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

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

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

Month	Monthly Fuel Consumption (gal)	Rolling 12-Month Total (gal)	Notes i.e. (Meter Reading)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**PROPOSED**

**ANNUAL EMISSIONS/MONITORING REPORT FORM  
FUEL CONSUMPTION  
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 Period: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

Equipment Description: CT-1

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

Serial/ID No.: \_\_\_\_\_

Type of Fuel: \_\_\_\_\_

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

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

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

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

Month	Monthly Fuel Consumption (gal)	Rolling 12-Month Total (gal)	Notes i.e. (Meter Reading)
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 Period: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

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

Equipment Capacity/Rating (specify units): \_\_\_\_\_  
(Units such as Horsepower, kilowatt, etc.)

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

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

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

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

**Fuel Certification:**

Report the maximum weight percent sulfur in the fuel oil no. 2 during the reporting period for which this certification is required. \_\_\_\_\_%

Report the name of the fuel additive(s) used and quantity used this calendar year:

Name	Quantity (gal/yr)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**MONITORING REPORT FORM  
SPEC 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 Period: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

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

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

Serial/ID No.: \_\_\_\_\_

Type of Fuel: \_\_\_\_\_

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

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

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

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

Month	Monthly Fuel Consumption (gal)	Rolling 12-Month Total (gal)	Notes i.e. (Meter Reading)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM  
SPEC USED OIL  
(CONTINUED, PAGE 2 OF 2)**

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

Did any of the used oil analyses indicate exceedances of the permitted limits:     YES     NO

If Yes, indicate the number of exceedances: \_\_\_\_\_

Indicate the maximum used oil analyses results received/performed (lowest for flash point):

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





**VISIBLE EMISSIONS FORM REQUIREMENTS  
STATE OF HAWAII**

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

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

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

**PROPOSED**

**VISIBLE EMISSIONS FORM  
STATE OF HAWAII**

(Make Copies for Future Use for Each Equipment)

Permit No.: 0031-04-C

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

Equipment and Fuel: \_\_\_\_\_

Source **X**  
Sun   
Wind 

Draw North Arrow



**Site Conditions:**

Stack height above ground (ft): \_\_\_\_\_

Stack distance from observer (ft): \_\_\_\_\_

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

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

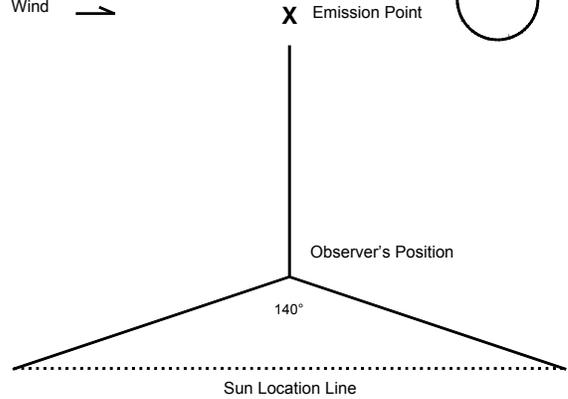
Wind speed (mph): \_\_\_\_\_

Temperature (F): \_\_\_\_\_

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

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

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



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

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

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

EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE SUMMARY REPORT

(Page 1 of 2) (Make Copies for Future Use)

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

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

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

State Permit No.: \_\_\_\_\_ Condition No.: \_\_\_\_\_

PSD Permit No.: \_\_\_\_\_ Condition No.: \_\_\_\_\_

Code of Federal Regulations (CFR): \_\_\_\_\_

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

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

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

Emission Limit: \_\_\_\_\_

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

Total Source Operating Time . . . . . \_\_\_\_\_

EMISSION DATA SUMMARY

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

Number of incidents of excess emissions . . . . . \_\_\_\_\_

2. Total Duration of Excess Emissions . . . . . \_\_\_\_\_

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

CEMS PERFORMANCE SUMMARY

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

Number of incidents of monitor downtime. . . . . \_\_\_\_\_

**EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE  
SUMMARY REPORT  
(CONTINUED, PAGE 2 OF 2)**

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

**CERTIFICATION by Responsible Official**

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

Name (Print/Type): \_\_\_\_\_

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

(Signature): \_\_\_\_\_

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0031-04-C  
PAGE 1 OF \_\_\_\_\_**

**[Issuance Date]** \_\_\_\_\_

**[Expiration Date]** \_\_\_\_\_

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

(Make Copies for Future Use)

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

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.**

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. 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 their own generated form in verbatim for Sections C and D.

**A. Attachment I, Standard Conditions**

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

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

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

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0031-04-C  
(CONTINUED, PAGE 2 OF \_\_\_\_ )**

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

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

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

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

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

**C. Special Conditions - Operational and Emissions Limitations (continued if needed)**

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

