

PROPOSED

Issue Date

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(XXXX XXXX XXXX XXXX XXXX)

09-XXXE CAB
File No. 0232-01

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

Dear Mr. Ribao:

**Subject: Covered Source Permit (CSP) No. 0232-01-C
Renewal Application No. 0232-04
Application for Modification No. 0232-03
Maui Electric Company, Ltd.
Kahului Generating Station
Located at: 200 Hobron Avenue, Kahului, Maui
UTM- 763,673 Meters East and 2,313,143 Meters North, Zone 4 (Old Hawaiian)
Date of Expiration: 5 Years from Issue Date**

The subject covered source permit is issued in accordance with Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information that you submitted as part of your applications for permit modification and renewal received on December 5, 2008 and January 9, 2008, respectively. The issuance of this permit is also based on the additional information received on July 7, August 6 and 10, and September 3, 10, 16, 21, and 24, 2009 as part your applications. The conditions of this permit supersede all conditions contained in all prior permits.

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

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

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

Compliance Certification Form
Annual Emissions Report Form: Boilers
Monitoring Report Form: Specification Used Oil
Monitoring Report Form: Fuel Oil Sulfur Content
Monitoring Report Form: Opacity Exceedances

Enclosed are the following for your use in monitoring visible emissions:

Visible Emissions Form Requirements State of Hawaii
Visible Emissions Form – Boilers
The Ringelmann Chart

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

Sincerely,

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

MM:smk

Enclosures

c: Blake Shiigi, EHS - Maui
CAB Enforcement Section

**ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date:

Expiration Date:

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

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

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

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

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

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

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

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

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit**, the permittee shall immediately notify the Department of Health of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

22. All certifications shall be in accordance with HAR, section 11-60.1-4.
(Auth.: HAR §11-60.1-4, HAR §11-60.1-90)
23. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:
- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
 - b. To sample or monitor at reasonable times substances or parameters to ensure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

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

26. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.
(Auth.: HAR §11-60.1-93)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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

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

**ATTACHMENT II: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This permit encompasses the following boilers with four (4) 185 feet high x 4 feet diameter flue gas exhaust stacks inside a common stack:

Unit Description

- | | |
|-----|---|
| K-1 | 5.0 MW (nominal), 94 MMBtu/hr, Combustion Engineering Boiler, serial no. 13413, with electric igniters; |
| K-2 | 5.0 MW (nominal), 94 MMBtu/hr, Combustion Engineering Boiler, serial no. 15345, with total combined 2.5 ft ³ /hr capacity gas fired igniters; |
| K-3 | 11.5 MW (nominal), 172 MMBtu/hr, Combustion Engineering Boiler, serial no.17343, with total combined 3.3 ft ³ /hr capacity gas fired igniters; and |
| K-4 | 12.5 MW (nominal), 181 MMBtu/hr, Babcock and Wilcox Boiler, serial no. PFI3030 with total combined 10 ft ³ /hr capacity gas fired igniters. |

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on each boiler listed above to show the model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Fuel Limits

- a. Except as specified in Attachment II, Special Condition No. B.1.b, Boilers K-1, K-2, K-3, and K-4 shall only be fired on one or a combination of the following fuels:

- 1) Fuel oil No. 6 with a maximum sulfur content not to exceed 2.0% by weight;
- 2) Fuel oil No. 2 with a maximum sulfur content not to exceed 0.5% by weight; and
- 3) Specification used oil meeting requirements in Attachment II, Special Condition No. B.4.

- b. Boiler K-2, K-3, and K-4 igniters may be fired on liquefied petroleum gas (e.g., propane, propylene, and butane).

- c. The total combined consumption of specification used oil fired by the boilers shall not exceed 300,000 gallons in any rolling twelve-month (12-month) period.

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

2. Visible Emissions

For any six minute averaging period, each boiler shall not exhibit visible emissions of forty (40) percent or greater, except as follows: during start-up, shutdown, or equipment breakdown, each boiler may exhibit visible emissions greater than forty (40) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, SIP §11-60-24)²

3. Alternate Operating Scenarios

- a. Upon receiving written approval from the Department of Health, the permittee may fire the boilers on alternate fuels provided the permittee demonstrates compliance with all applicable state and federal requirements and conditions of this permit. The alternate fuel shall not result in an increase in emissions of any air pollutant or in the emission of an air pollutant not previously emitted. Requests for firing the boilers on alternate fuels shall be in accordance with Attachment II, Special Condition No. D.5.a.
- b. Upon receiving written approval from the Department of Health, the permittee may use specific fuel additives to control algae, lubricity, improve combustion, inhibit corrosion, or other reasons. Requests to use fuel additives shall be in accordance with Attachment II, Special Condition No. D.5.b. The Department of Health may provide a conditional approval to impose additional monitoring, testing, record keeping, and reporting requirements to ensure the use of the fuel additive is in compliance with the applicable requirements.
- c. Upon receiving written approval from the Department of Health, the permittee may temporarily replace Boilers K-1, K-2, K-3, or K-4 if any repair work (i.e., equipment failure, overhaul or any major equipment problems requiring maintenance for efficient operation) reasonably warrants taking the permitted unit(s) out of service provided the following provisions are adhered to:
 - 1) A request for replacing each boiler with a temporary replacement unit shall be submitted in accordance with Attachment II, Special Condition No. D.5.c.
 - 2) Each temporary replacement unit must be similar in size to the permitted boiler being replaced with equal or lesser emissions.

- 3) Each temporary replacement shall comply with all applicable permit conditions required for the primary unit, including all air pollution control equipment requirements, operating restrictions, and emission limits.
- 4) Removal and return information shall be submitted for the permitted boiler and replacement unit in accordance with Attachment II, Special Condition No. D.5.d.

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

4. Specification Used Oil

- a. The permit conditions prescribed herein may at any time be revised by the Department of Health to conform to any 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 handling, transporting, storage, and burning of used oil.
- c. The used oil may consist of lube oil from Maui Electric Company Ltd. owned, operated, or maintained units (including combined heat and power units), dielectric fluids, used biodiesel, and used solvents. The used oil shall not be contaminated with hazardous spent halogenated solvents or other chlorinated hazardous waste. Used oil may be obtained from other sources, provided written approval from the Department of Health is obtained prior to accepting used oil from any other source. An analysis shall accompany each delivery of specification used oil received from other sources.
- d. The used oil shall be sampled and analyzed before transferring it into the facility's used oil storage tank and burning the fuel in the boilers after fuel specification requirements have been verified pursuant to Attachment II, Special Condition Nos. B.4.f and C.2.b. Used oil samples shall be taken in such a manner that sampling is representative of the used oil collected.
- e. This permit does not authorize the permittee to burn hazardous waste or off-specification used oil. The permittee shall not burn the used oil if it is declared or determined to be a hazardous waste or off-specification used oil.

- f. Specification used oil fired by the boilers shall not exceed the following limits:

Pollutant/Property	Limit
Sulfur	2.0% maximum
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Polychlorinated Biphenyls (PCBs)	< 2 ppm
Flash Point	100 °F minimum

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

Section C. Monitoring and Recordkeeping Requirements

1. 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 maintenance, inspection, and repair records and copies of all reports required by this permit. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department of Health or its representative(s) upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-81, §11-60.1-90)

2. Fuel Consumption

- a. The permittee shall maintain records of fuel deliveries identifying the delivery dates and the type (e.g., propane, fuel oil No. 2, fuel oil No. 6, and specification used oil) and the amount of each fuel received.
- b. Records shall be maintained on the high heating value (HHV) in Btu/gallon and sulfur content (% by weight) for fuel oil No. 2, fuel oil No. 6, and specification used fired by the boilers. The HHV and sulfur content for fuel oil No. 2 and fuel oil No. 6 may be determined from the fuel supplier's records prior to combining these fuels with the existing fuel supply. For specification used oil, the HHV and sulfur content shall be determined by sampling and analyzing the fuel prior to combining it with the existing fuel supply. The fuel analysis may be performed by the permittee, fuel supplier, or other qualified third party. The analysis to determine fuel sulfur content of the specification used oil shall be performed in accordance with either of the following American Society for Testing and Materials (ASTM) test methods: D129, D1266, D1552, D2622, D4294, or D5453.

- c. Records shall be maintained on the HHV for liquefied petroleum gas fired by the boilers as an igniter fuel. The HHV for liquefied petroleum gas may be determined from the fuel supplier's records prior to combining the fuel with the existing fuel supply.
- d. A non-resetting fuel flow meter shall be installed, operated, and maintained for each boiler fired on fuel oil Nos. 2 and 6 and for other applicable boilers fired on specification used oil to permanently measure the gallons of each fuel fired by the boilers. The non-resetting fuel flow meter shall not allow the manual resetting or other manual adjustments of the totalizer readings. The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading.

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

3. Specification Used Oil

- a. A representative sample of used oil shall be taken prior to firing each boiler on the used oil. Each sample shall be submitted in a timely manner to a qualified laboratory for an analysis to determine compliance with the limits specified in Attachment II, Special Condition No. B.4.f. The laboratory analysis of the collected used oil shall be obtained prior to blending it with any fuel oil.
- b. The following records shall be maintained on the used oil consumption:
 - 1) The supplier, date, and amount for each delivery of used oil received; and
 - 2) The sample date, amount of used oil the sample represents, date of used oil analysis, and reports of the used oil analysis.

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

4. Alternate Operating Scenarios

- a. The permittee shall contemporaneously with making a change from one operating scenario to another in accordance with Attachment II, Special Condition No. B.3., record in a log at the permitted facility the scenario under which it is operating.
- b. The permittee shall maintain all records corresponding to the implementation of an alternate operating scenario specified in Attachment II, Special Condition No. B.3.

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

5. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for the equipment covered under this permit. Inspection and replacement of parts for the boilers and associated

equipment shall be well documented. At a minimum, these records shall include: the date of the inspection; 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)

6. Visible Emissions

- a. Except in those months when visible emission observations are conducted by a certified reader for the annual observations, the permittee shall conduct monthly (calendar month) visible emission observations for each boiler subject to opacity limits in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each boiler. Records shall be completed and maintained in accordance with the Visible Emissions Form Requirements.
- b. The permittee shall conduct annually (calendar year) visible emission observations for each boiler subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each boiler. Records shall be completed and maintained in accordance with the Visible Emissions Form Requirements.
- c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual visible emissions observation. 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 prior visible emission 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 visible emission observation.

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

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

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

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

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

2. Deviations

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

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

3. Monitoring Reports

The permittee shall submit semi-annually the following reports to the Department of Health. The reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31), and shall be signed and dated by a responsible official. The enclosed **Monitoring Report Form: Specification Used Oil, Monitoring Report Form: Fuel Oil Sulfur Content, and Monitoring Report Form: Opacity Exceedances** shall be used.

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

4. Annual Emissions

As required by Attachment IV, Annual Emissions Reporting Requirements, and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following** the end of each calendar year. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension. The enclosed **Annual Emissions Report Form: Boilers** shall be used.

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

5. Alternate Operating Scenarios

a. The following information shall be provided to the Department of Health for written requests to fire the boilers on alternate fuels:

- 1) Fuel type;
- 2) Fuel consumption rate;
- 3) Fuel mixture percentage if blending alternate fuel;
- 4) Emission calculations;
- 5) Ambient air quality impact assessment if necessary;

- 6) Fuel storage information;
 - 7) Method of monitoring alternate fuel consumption; and
 - 8) Method of monitoring alternate fuel properties and composition.
- b. For written requests to use fuel additives, the permittee shall, at a minimum, provide the Department of Health with the specifications of the fuel additive(s), maximum expected emission rates of any criteria or non-criteria pollutant, certification that corresponding emission rates will not exceed permitted emission rates, and any other information requested by the Department of Health.
 - c. Written requests submitted to the Department of Health for exchanging each permitted boiler with a temporary replacement unit shall identify, at a minimum, the reasons for the replacement of the primary boiler from the site of operation and the estimated time period/dates for the temporary replacement unit, type and size of the temporary replacement unit, and the replacement unit's emissions data and stack parameters.
 - d. Prior to the removal and return of each boiler, the permittee shall submit to the Department of Health written documentation on the removal and return dates and the make, size, model, and serial numbers for both the temporary replacement unit and the permitted boiler.

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

6. Performance Testing

- a. At least **thirty (30) days prior** to conducting a source performance test pursuant to Special Conditions, Section E, the permittee shall submit a written performance test plan to the Department of Health and U.S. EPA, Region 9 in accordance with Attachment II, Special Condition No. E.3.
- b. Written reports of the results of the performance tests conducted to demonstrate compliance shall be submitted to the Department of Health and U.S. EPA, Region 9 **within sixty (60) days** after the completion of the performance test, and shall be in conformance with Attachment II, Special Condition No. E.4.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR § 60.676)¹

7. 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 Compliance Certification Form pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;

- b. The compliance status;
- c. Whether compliance was continuous or intermittent;

- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- f. Information as required by 40 CFR Part 70, §70.6(c)(5)(iii); and
- g. 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 or authorized representative.

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

(Auth.: HAR §11-60.1-86, §11-60.1-90)

Section E. Testing Requirements

1. Performance Testing

Within **one-hundred and (180) days after permit issuance**, the permittee shall conduct or cause to be conducted one-time performance tests on boilers K-1, K-2, K-3, and K-4 to determine opacity and the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and volatile organic compounds (VOCs). The performance tests for the mass emission rates and opacity shall be conducted at each boiler's maximum operating load firing fuel oil No. 6. Additional performance testing may be required by the Department of Health in accordance with Attachment II, Special Condition No. E.6.

(Auth.: HAR §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.8)

2. Performance Test Methods

The performance tests shall be conducted and the results reported in accordance with the test methods set forth in 40 CFR, Part 60, Appendix A, and 40 CFR, Part 60, Section 60.8. The following test methods, or EPA approved equivalent methods shall be used.

Performance tests for the mass emissions rates shall be conducted using EPA Methods 1 through 4 for sample sites and number of traverse sites, gas velocity and volumetric flow rate, gas analysis, and determining moisture in stack gases. The following additional methods/provisions shall apply to determine the mass emission rates and opacity:

- a. The PM emissions shall be determined with EPA Method 5 for the filterable portion and EPA Method 202 for the condensable portion.
- b. The PM₁₀ emissions shall be determined with EPA Methods 5 or 201A for the filterable portion and EPA Method 202 for the condensable portion.
- c. The PM_{2.5} emissions shall be determined with EPA Methods 5 or Other Test Method (OTM)-27 for the filterable portion and EPA Method OTM-28 for the condensable portion.
- d. Performance tests for the emissions of NO_x shall be conducted using EPA Method 7.
- e. Performance tests for the emissions of CO shall be conducted using EPA Method 10.
- f. The VOC emissions shall be determined with EPA Method 18 to measure VOC emissions in conjunction with EPA Method 25A for subtracting exempt VOC contributions.
- g. Performance tests to determine opacity shall be conducted using EPA Method 9.
- h. Performance tests for the mass emission rates shall consist of three (3) separate runs using the applicable test method. For each run, the emission rate shall be calculated in pound per hour (lb/hr) and pound per million British thermal unit (lb/MMBtu). The arithmetic mean of the results from the three (3) runs shall apply to determine the emission rates.
- i. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, 40 CFR §60.8; SIP §11-60-15)^{1,2}

3. Performance Test Plan

At least thirty (30) calendar days prior to performance testing, the permittee shall submit a written performance test plan to the Department of Health and U.S. EPA, Region 9 that includes the date(s) of the test, test duration, test locations, test methods, source operation and other parameters that may affect test results. Such a plan shall conform to EPA guidelines including quality assurance procedures. A test plan or quality assurance plan

that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

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

4. Performance Test Report

Within sixty (60) days after completion of the performance testing, the permittee shall submit to the Department of Health and U.S. EPA Region 9 the test report which shall include the operating conditions of the boilers at the time of the test, the summarized test results, comparative results, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-11, §11-60.1-90; SIP §11-60-15; 40 CFR §60.8)^{1,2}

5. Testing Expense and Monitoring

The permittee shall provide sampling and testing facilities at its own expense. All performance tests may be monitored by the Department of Health.

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

6. Additional Performance Testing

The Department of Health, if so desires, may at any time require the permittee to conduct additional performance testing on the boilers.

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

Section F. Agency Notification

1. Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition 28.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

¹ 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.

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 II: INSIG: SPECIAL CONDITIONS – INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date:

Expiration Date:

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

1. Attachment II-INISG of this permit encompasses the following insignificant activities:
 - a. 500 kW Waukesha emergency black start diesel engine generator;
 - b. Three (3) 27,976 barrel fuel oil No. 6 storage tanks;
 - c. 35,300 gallon used lube oil storage tank (Tank No. 5);
 - d. 9,492 gallon fuel oil LO-1 (calcium nitrate) storage tank (Tank No. 6);
 - e. 460 gallon diesel tank servicing the black start diesel engine generator;
 - f. 500 gallon propane tank for boiler ignition fuel;
 - g. 250 gallon tote tank(s);
 - h. Fuel burning equipment with a heat rate input capacity less than 1 MMBtu/hr other than smoke house generators and gasoline fired industrial equipment;
 - i. Paint spray booths that emit less than 2 tons per year of any regulated air pollutant; and
 - j. Other activities that emit less than 500 lb/yr of HAP, 25% of the significant amount of emissions as defined in HAR §11-60.1-1, 5 TPY CO, and 2 TPY of each regulated air pollutant other than CO, and which are determined on a case by case basis to be insignificant activities.

(Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

1. The permittee shall take measures to operate insignificant activities in accordance with the provisions of HAR, Subchapter 2.

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

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

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

Section C. Monitoring and Recordkeeping Requirements

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

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

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

Section D. Notification and Reporting

1. Compliance Certification.

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

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Information as required by 40 CFR Part 70, §70.6(c)(5)(iii); and
- f. Any additional information as required by the Department of Health including information to determine compliance.

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

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

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

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

CSP No. 0232-01-C
Attachment II - INSG
Page 3 of 3
Issuance Date:
Expiration Date:

PROPOSED

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date:

Expiration Date:

The following requirements for the submittal of annual fees are established pursuant to 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
919 Ala Moana Boulevard, Room 203
Honolulu, HI 96814**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date:

Expiration Date:

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

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

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

PROPOSED

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0232-01-C
PAGE 1 OF ____**

Issuance Date: _____

Expiration Date: _____

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

(Make Copies of the Compliance Certification Form for Future Use)

For Period: _____ Date: _____

Company/Facility Name: Maui Electric Company, Ltd.

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.

PROPOSED

**COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0232-01-C
(CONTINUED, PAGE 2 OF ___)**

Issuance Date:

Expiration Date:

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

Instructions:

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

A. Attachment I, Standard Conditions

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

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

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

PROPOSED

(Make Additional Copies if Needed)

COMPLIANCE CERTIFICATION FORM COVERED SOURCE PERMIT NO. 0232-01-C (CONTINUED, PAGE ___ OF ___)	
Issuance Date:	Expiration Date:

D. Deviations

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

(Make Additional Copies if Needed)

PROPOSED

**ANNUAL EMISSIONS REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0232-01-C
(PAGE 1 OF 2)**

Issuance Date: _____

Expiration Date: _____

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

(Make Copies for Future Use)

For Reporting Period: _____ Date: _____

Company Name: Maui Electric Company, Ltd.

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

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

1. Report the boiler fuel consumption as follows:

Boiler K-1			
Serial No.	Fuel Type	HHV	Fuel Use
		Btu/gal	gallons
13413	Fuel Oil No. 6		
	Fuel Oil No. 2		
	Specification Used Oil		

Boiler K-2			
Serial No.	Fuel Type	HHV	Fuel Use
		Btu/gal	gallons
15345	Fuel Oil No. 6		
	Fuel Oil No. 2		
	Specification Used Oil		

Boiler K-3			
Serial No.	Fuel Type	HHV	Fuel Use
		Btu/gal	gallons
	Fuel Oil No. 6		

PROPOSED

17343	Fuel Oil No. 2		
	Specification Used Oil		

ANNUAL EMISSIONS REPORT FORM BOILERS COVERED SOURCE PERMIT NO. 0232-01-C (PAGE 2 OF 2)	
Issuance Date:	Expiration Date:

(Make copies for Future Use)

1. Report the boiler fuel consumption as follows (continued):

Boiler K-4			
Serial No.	Fuel Type	HHV	Fuel Use
		Btu/gal	gallons
PF13030	Fuel Oil No. 6		
	Fuel Oil No. 2		
	Specification Used Oil		

**MONITORING REPORT FORM
SPECIFICATION USED OIL
COVERED SOURCE PERMIT NO. 0232-01-C
(PAGE 1 OF 2)**

Issuance Date: _____

Expiration Date: _____

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

(Make Copies for Future Use)

For Reporting Period: _____ Date: _____

Company Name: Maui Electric Company, Ltd.

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

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

1. Report the total combined monthly specification used oil consumption for boilers K-1, K-2, K-3, and K-4 as follows:

Month	Boilers K-1, K-2, K-3, and K-4	
	Total Combined Specification Used Oil Consumption	
	Monthly Basis	12-Month Rolling Basis
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

PROPOSED

**MONITORING REPORT FORM
SPECIFICATION USED OIL
COVERED SOURCE PERMIT NO. 0232-01-C
(PAGE 2 OF 2)**

Issuance Date:

Expiration Date:

(Make copies for Future Use)

2. Indicate the highest specification used oil analysis results for the reporting period:

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

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

_____.

PROPOSED

**MONITORING REPORT FORM
FUEL OIL SULFUR CONTENT
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date: _____

Expiration Date: _____

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

(Make Copies for Future Use)

For Reporting Period: _____ Date: _____

Company Name: Maui Electric Company, Ltd.

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

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

1. Report the maximum weight percent sulfur content for fuels listed in the following table for the reporting period:

Model	Maximum % Sulfur Content by Weight
Fuel Oil No. 2	
Fuel Oil No. 6	

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0232-01-C**

Issuance Date:

Expiration Date:

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

1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in five (5) percent increments (e.g., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. For V.E. observations of stacks, stand at least three (3) stack heights but not more than a quarter mile from the stack.
4. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
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 the 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 years, and made available to the Department of Health, or their representative upon request.

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

**VISIBLE EMISSIONS FORM
BOILERS
COVERED SOURCE PERMIT NO. 0232-01-C**

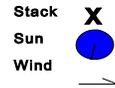
Issuance Date: _____ **Expiration Date:** _____

(Make Copies for Future Use for Each Boiler)

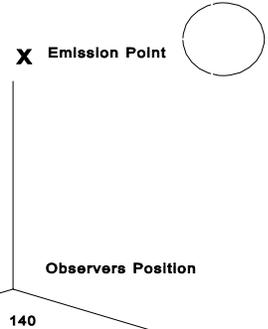
Company Name: Maui Electric Company, Ltd.
 Equipment and fuel: _____

Site Conditions:

Emission point or stack height above ground (ft): _____
 Emission point or stack distance from observer (ft): _____
 Emission color (black or white): _____
 Sky conditions (% cloud cover): _____
 Wind speed (mph): _____
 Temperature (°F): _____
 Observer Name: _____
 Certified? (Yes/No): _____



Draw North Arrow



Observation Date and Start Time: _____

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

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

Observation Date and Start Time: _____

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

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