PROPOSED

[Issuance Date]

CERTIFIED MAIL 04-XXXE CAB
RETURN RECEIPT REQUESTED File 0067-02

Mr. Edward L. Reinhardt, President
Maui Electric Company, Ltd.
P. O. Box 398
Kahului, Hawaii 96732

Dear Mr. Reinhardt:

Subject: Covered Source Permit (CSP) No. 0067-02-C
Renewal Application No. 0067-08
MECO Maalaea Generating Station
Fourteen (14) Diesel Engine Generators and Two (2) Combustion Turbines
Located at: Maalaea, Maui
Date of Expiration: [Five Year Period from Issuance Date]

The subject Covered Source Permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and additional information that you submitted as part of your renewal application dated May 29, 2002 and the additional information dated July 30, 2002, February 10, 2003, December 9, 2003, March 24, 2004, and May 3, 2004.

This permit supersedes CSP No. 0067-02-C issued on June 23, 1998 and permit amendment issued on September 27, 2001, in their entirety. The conditions pertaining to Diesel Engine Generator unit nos. M5 and M7 are covered in CSP No. 0067-01.

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

Attachment I:	Standard Conditions
Attachment IIA:	Special Conditions for Diesel Engine Generators
Attachment IIB:	Special Conditions for Combustion Turbines
Attachment IIC:	Special Conditions for Insignificant Activities
Attachment III:	Annual Fee Requirements
Attachment IV:	Annual Emissions Reporting Requirements

The following forms are enclosed for some of the monitoring and reporting required by this Covered Source Permit:

Daily "Start-up" and "Shutdown" Monitoring Form: Combustion Turbine Generators
Annual Emissions Report Form: Diesel Engines
Annual Emissions Report Form: Combustion Turbines
Monitoring Report Form: Spec Used Oil Consumption
Monitoring Report Form: Operating Hours
Monitoring Report Form: Fuel Consumption
Monitoring Report Form: Visible Emissions
Excess Emission 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 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

SS:lk
Enclosures
c: DHO, Maui
Blake Shiigi, EHS-Maui

ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0067-02-C

[Issuance Date] **[Expiration Date]**

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

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

   (Auth.: HAR §11-60.1-90)

2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be willfully defaced, altered, forged, counterfeited, or falsified.

   (Auth.: HAR §11-60.1-6; SIP §11-60-11)[2]

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

   (Auth.: HAR §11-60.1-7; SIP §11-60-9)[2]

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

   (Auth.: HAR §11-60.1-7)

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

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

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

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

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

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

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

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

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

   (Auth.: HAR §11-60.1-90)

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

    (Auth.: HAR §11-60.1-90)

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

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

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

    (Auth.: HAR §11-60.1-90)

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

    (Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health in writing of the following dates:

    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 Administrator along with a claim of confidentiality.

    (Auth.: HAR §11-60.1-14, §11-60.1-90)

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

    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. A copy of applicable correspondence or records submitted to the Department of Health shall be provided to the U.S. EPA Administrator.

    (Auth.: HAR §11-60.1-90)

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

    (Auth.: HAR §11-60.1-14, §11-60.1-90)

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

    a. 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)

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

    (Auth.: HAR §11-60.1-9, §11-60.1-90)

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

    (Auth.: HAR §11-60.1-90)

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

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

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

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

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

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

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

26. Each permit renewal application shall be submitted to the Department of Health no 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]

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

    (Auth.: HAR §11-60.1-93)

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

    (Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

30. 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 IIA: SPECIAL CONDITIONS FOR DIESEL ENGINE GENERATORS
COVERED SOURCE PERMIT NO. 0067-02-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 attachment encompasses the following equipment and associated appurtenances:

Unit	Description
M1	One (1) 2.5 MW General Motors Diesel Engine Generator, model no. 20-645E4, 29.2 MMBtu/hr;
M2	One (1) 2.5 MW General Motors Diesel Engine Generator, model no. 20-645E4, 29.2 MMBtu/hr;
M3	One (1) 2.5 MW General Motors Diesel Engine Generator, model no. 20-645E4, 29.2 MMBtu/hr;
M4	One (1) 5.6 MW Cooper-Bessemer Diesel Engine Generator, model no. LSV-20-T, 58.8 MMBtu/hr;
M6	One (1) 5.6 MW Cooper-Bessemer Diesel Engine Generator, model no. LSV-20-T, 58.8 MMBtu/hr;
M8	One (1) 5.6 MW Colt Industries Diesel Engine Generator, model no. C-P PC2V, 60.2 MMBtu/hr;
M9	One (1) 5.6 MW Colt Industries Diesel Engine Generator, model no. C-P PC2V, 60.2 MMBtu/hr;
M10	One (1) 12.5 MW Mitsubishi Diesel Engine Generator, model no. 185V52/55A, 122.7 MMBtu/hr;
M11	One (1) 12.5 MW Mitsubishi Diesel Engine Generator, model no. 185V52/55A, 122.7 MMBtu/hr;
M12	One (1) 12.5 MW Mitsubishi Diesel Engine Generator, model no. 185V52/55A, 122.7 MMBtu/hr;
M13	One (1) 12.5 MW Mitsubishi Diesel Engine Generator, model no. 185V52/55A, 122.7 MMBtu/hr;
X1	One (1) 2.5 MW General Motors Diesel Engine Generator, model no. 20-645E4, 28.5 MMBtu/hr;
X2	One (1) 2.5 MW General Motors Diesel Engine Generator, model no. 20-645E4, 28.5 MMBtu/hr;

SG1 One (1) 600 kW General Motors/Detroit Black Start Diesel Engine Generator, model no. 12V92TAB/8123-7416.

(Auth.: HAR §11-60.1-3)

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

(Auth.: HAR §11-60.1-5)

Section B. Operational and Emission Limitations

1. Air Pollution Control Equipment.

The permittee shall continuously operate and maintain the following air pollution control equipment to meet the emission limits as specified in Special Condition B.3. of this Attachment:

a. Fuel injection timing retard (FITR) between two (2) degrees and five (5) degrees, inclusive, at all loads for diesel engine generators, unit nos. M12 and M13.

b. FITR of 4 degrees at all loads for diesel engine generators, unit nos. X1 and X2.

c. The use of an alternative control system other than those specified above, contingent upon receipt of written approval by the Department of Health to use such a system, shall not relieve the permittee from the responsibility to meet all emission limitations contained within this Covered Source Permit.

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

2. Fuel Limit and Specifications.

a. The fuel consumption for the two (2) diesel engine generators, unit nos. M10 and M11 shall not exceed 1,592 gallons per hour of diesel fuel No. 2 on a daily and annual average basis.

b. Diesel engine generators unit nos. M1 through M11, X1, X2 and SG1 shall be fired on diesel fuel no. 2 or an alternate fuel allowed under Special Condition B.5.b. of this Attachment. The sulfur content of all fuels shall not exceed 0.4 percent by weight and shall be verified by Special Condition C.2. of this Attachment.

c. The diesel engine generators unit nos. M12 and M13 shall be fired on diesel fuel no. 2, biodiesel, or an alternate fuel allowed under Special Condition B.5.b. of this Attachment. The sulfur content of all fuels shall not exceed 0.4 percent by weight and shall be verified by Special Condition C.2. of this Attachment.

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

3. Maximum Emission Limits

   a. The permittee shall not discharge or cause the discharge into the atmosphere from the diesel engine generators, nitrogen oxides (NO_X), sulfur dioxide (SO_2), particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOC) in excess of the following three-hour average limits:

DIESEL ENGINE GENERATORS, UNIT NOS. M12, M13, X1, and X2

Unit No.	NO_X [a]		SO_2		PM[b]		CO		VOC [c]	
	lbs/hr	ppmvd[d]	lbs/hr	ppmvd[d]	lbs/hr	gr/dscf [e]	lbs/hr	ppmvd[d]	lbs/hr	ppmvd[d]
M12	256.1	595	58.0	110	39.1	0.17	70.6	234	31.6	211
M13	256.1	595	58.0	110	39.1	0.17	70.6	234	31.6	211
X1	68.4	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
X2	68.4	600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[a] Measured as NO_2
[b] assumed PM = PM10
[c] Reported as carbon.
[d] at 15 % O_2
[e] at 12 % CO_2

   b. Unit nos. M10 and M11 shall have the following three-hour average emission limits:

Pollutant	Limitations
NO_2	1.50 lb/MMBtu
PM	0.054 lb/MMBtu
CO	0.41 lb/MMBtu

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

4. Opacity Limits.

   a. The diesel engine generators, unit nos. M1, M2, and M3 shall not exhibit visible emissions of forty (40) percent opacity or greater for any six (6) minute averaging period, except as follows: during start-up, shutdown, or equipment breakdown, unit nos. M1, M2, and M3 may exhibit visible emissions greater than forty (40) percent but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

b. The diesel engine generators, unit nos. M4 through M13, X1 and X2 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, shutdown, or equipment breakdown, unit nos. M4 through M13, X1 and X2 may exhibit visible emissions greater than twenty (20) percent but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minute period. In the event of equipment breakdown, unit nos. M12 and M13 shall be shut down within one (1) hour if problems causing opacity exceedences cannot be corrected within the first six-minute period.

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

5. Alternate Operating Scenarios.

Terms and conditions for alternate operating scenarios are as follows:

a. The permittee may replace the diesel engine generators 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 diesel engine generators from its site and the following provisions are adhered to:

i. Written notification identifying the reasons for the replacement from the site of operation is submitted to and approved by the Department of Health prior to the exchange;
ii. The unit is replaced with a diesel engine generator of the same make, model, and size;
iii. The temporary replacement unit complies with all applicable conditions including all air pollution control equipment requirements, operating restrictions and emission limits;
iv. The diesel engine generator shall be repaired and returned to service at the same location in a timely manner; and

v. Prior to the removal and return of any diesel engine generator, the permittee shall submit to the Department of Health 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. Upon receiving written approval from the Department of Health, the permittee may burn an alternative fuel provided the permittee demonstrates compliance with all applicable state and federal requirements and applicable conditions of this covered source permit. The alternative fuel shall be burned only temporarily, and shall not result in an increase in emissions of any air pollutant or in the emission of any air pollutant not previously emitted. The permittee shall not be allowed to switch fuels unless all of the following information is provided:

i. Specific type of fuel provided;
ii. Consumption rate of the fuel;
iii. Fuel blending rate;
iv. Emissions calculations;
v. Ambient air quality analyses verifying that SAAQS will be met;
vi. Fuel storage; and
vii. Plan to monitor and record the fuel analyses and consumption.

c. The permittee may use fuel additives to reduce corrosion, control biological growth, and enhance combustion. Additives used during this scenario shall not affect emission estimates.

d. Upon receiving written approval from the Department of Health, the permittee may use alternate means and methods to improve combustion and/or reduce emissions provided the permittee demonstrate that the following conditions will be met.

i. The national and state ambient air quality standards will not be violated.
ii. The emissions and emission rates do not exceed the permitted emission limits.
iii. The facility shall continue to operate and comply with the conditions of this permit.
iv. There are no emissions of air pollutants not previously emitted.

The Department of Health may approve, conditionally approve, or deny any request for using alternate means and methods. Under no circumstance shall an alternate mean and/or method be employed without the prior written approval, or conditional approval, of the Department of Health.

e. 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 by the Department of Health, submit written notification to the Department of Health; and

f. The terms and conditions under each alternate operating scenario shall meet all applicable requirements including the conditions of this permit.

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

6. Operating Hours.
   a. The operating hours of the diesel engine generators unit nos. X1 and X2 shall not exceed 4,380 hours per unit in any rolling twelve (12) month period.

   b. The operating hours of the black start diesel engine generator unit no. SG1 shall not exceed 300 hours per unit in any rolling twelve (12) month period.

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

7. Used Oil.

   a. The permit conditions prescribed hereinafter may be revised at any time by the Department of Health to reflect promulgated rules on used oil.

   b. This permit does not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing, and burning of used oil. If this permit is determined to be in conflict with any state or federal rules, the permit shall be surrendered to the Department of Health or their representative upon request.

   c. Used Oil Specifications
   The following constituents/properties of the used oil shall not exceed the specified limits listed below:

Constituent/Property	Allowable Limit
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100^{o}F minimum
Polychlorinated Biphenyls (PCB)	<2 ppm maximum
Sulfur	0.4% by weight maximum

   d. This permit does not authorize the permittee to burn any hazardous waste or any used oil exceeding the limits as specified in Special Condition No. B.7.c. of this Attachment. The permittee shall not burn, but properly dispose of the used oil if declared or determined to be a hazardous waste or the analysis of the used oil indicates any exceedences of the allowable limits.

   e. The used oil shall consist only of waste oil, lubricating oil, waste diesel oil, crankcase oil, solvents, and kerosene obtained from equipment operating at MECO power plants. Used oil may also be obtained from other sources, provided a written notification identifying the new source is submitted to the Department, and approved, prior to the acceptance of the used oil. In no case shall the used oil include any dielectric fluid or transformer oil. The used oil shall not be contaminated with hazardous spent halogenated solvents or other chlorinated hazardous wastes.

   f. The permittee shall not burn more than 150,000 gallons of used oil per rolling twelve-month period. In addition, the permittee may not burn the used oil at a rate greater than 338 gallons per hour. The used oil shall be blended with fuel oil prior to burning. The percentage of used oil in the fuel mixture shall not exceed five percent by volume.

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

PROPOSED

Section C. Monitoring and Recordkeeping Requirements

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

1. Operating Hours.

   The permittee shall, at its own expense, operate and maintain a non-resetting hour meter on each diesel engine generator, unit nos. M10, M11, X1, X2, and SG1 for the permanent recording of the total hours the equipment is operated. Monthly records shall be kept of the beginning and ending meter readings and the total hours of operation. Monthly operational summaries shall include the total operational hours of the equipment, and the total hours of operation based on a 12-month rolling average.

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

2. Fuel Specifications.

   a. Sulfur Content of Fuels

      The sulfur content of all fuels fired in the diesel engine generators shall be tested in accordance with the most current American Society for Testing and Materials (ASTM) methods.

      i. ASTM Method D4294-90 is a suitable alternative to Method D129-91 for determining the sulfur content. The fuel sulfur content shall be verified by both of the following methods:

         1) A representative sample of each batch of fuel received shall be analyzed for its sulfur content; and
         2) A certificate of analysis on the sulfur content shall be obtained for the fuel delivered by the supplier.

      ii. ASTM Method D5453 or D6920-03 shall be used to determine the sulfur content in biodiesel. Alternate test methods may be used with the written consent of the Department of Health. The fuel sulfur content of biodiesel shall be verified by both of the following methods:

         1) A sample from the permittee's biodiesel storage tank shall be analyzed for its sulfur content at least once per annum.
         2) A certificate of analysis on the sulfur content shall be obtained for the fuel delivered by the supplier, at least once per annum.

b. Fuel Usage

The permittee shall maintain and operate a non-resetting volumetric flow meter for the continuous measurement and recording of fuel usage in unit nos. M10 and M11. The permittee shall record the operating hours, fuel consumption, and the average fuel consumption rate (gph) each time units M10 and M11 operate. At the end of each calendar year, the permittee shall calculate the average hourly fuel consumption rate (gph) for the calendar year.

c. Gross Calorific Value

The Gross Calorific Value of the fuel to be fired in unit nos. M12 and M13 shall be measured each calendar quarter, using ASTM Method D-240-76. The permittee shall furnish the Department of Health with a written report of the results of such test for every calendar quarter, by the end of the following month.

d. Used Oil Sample Collection and Analysis

A representative sample shall be taken of the used oil prior to burning in the diesel engine generators. Each sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/ properties for which limits are indicated in Special Condition No. B.7.c. of this Attachment. The laboratory analysis of the collected used oil shall be obtained prior to blending with any fuel oil.

e. Monitoring of Used Oil Consumption

The permittee shall install, operate, and maintain a non-resetting volumetric flow meter on each of the used oil storage tanks for the permanent recording of the gallons of used oil consumed. The flow meter reading shall be recorded hourly and at the beginning and end of each calendar month. Records of the total gallons of fuel consumed shall be maintained on an hourly, monthly, and rolling 12-month basis.

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

3. The permittee shall maintain records of all fuel deliveries. The records shall include as a minimum, the receipts of fuel deliveries identifying the delivery dates, the type and amount of fuel received, and the supplier's certificate showing the sulfur content analysis of the fuel delivered.

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

4. Performance Test

Annual source performance tests for unit nos. M12, M13, X1, and X2 shall be conducted pursuant to Section E of this Attachment.

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

5. Inspection, Maintenance, and Repair Log

   The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the diesel engine generators. 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)

6. All test/sampling/monitoring records shall include, if applicable:

   a. Monitoring location, date and time of sampling or measurements;
   b. Dates sampling analyses were performed;
   c. Name and address of the company or entity that performed the analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during the time of sampling or measurement.

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

7. Continuous Emissions Monitoring

   The permittee shall operate and maintain a continuous emissions monitoring system (CEMS) to measure and record the opacity, NO_X (as NO_2), and CO_2 or O_2 concentrations in the stack gas from unit nos. M12 and M13. If a CO_2 CEM is used, 40 CFR Part 60, Appendix A, Method 20, Equations 20-2 and 20-5 shall be utilized. The system shall meet USEPA performance specifications (40 CFR Part 60 Section 60.13 and 40 CFR Part 60, Appendix B, and 40 CFR Part 60, Appendix F). The emission rates for NO_X shall be recorded in parts per million by volume dry (ppmvd) at 15percent O_2. The NO_X CEMS shall record and collect data for a minimum of 85 percent of unit no. M12 and M13 operating hours during each calendar quarter.

   (Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §60.13, Appendices A, B and F)[1]

8. The permittee shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required to be recorded by 40 CFR 60.13 in a permanent form suitable for inspection.

   (Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §60.13)[1]

9. The permittee shall notify the Department of Health in writing **within thirty (30) days** prior to conducting performance specification tests on the CEMS. The testing date shall be in accordance with the performance test date identified in 40 CFR Part 60 Section 60.13.

   (Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR §60.13)[1]

10. Upon completion of the performance specification tests and thereafter, the CEMS shall be on-line and fully operational. Excess emissions indicated by the CEMS shall be considered violations of the applicable emissions limits.

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

11. Visible Emissions (V.E.).

    a. Except for unit nos. M12 and M13, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for each diesel engine subject to opacity limits in accordance with Method 9 or by use of a Ringlemann Chart as provided. The monthly observation for each diesel engine shall consist of two (2) consecutive six (6) minute observations taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

    b. Except for unit nos. M12 and M13, the permittee shall conduct **annually** (*calendar year*) V.E. observations for each diesel engine subject to opacity limits by a certified reader in accordance with Method 9. The annual observation for each diesel engine shall consist of two (2) consecutive six (6) minute observations taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.

    c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for a specific annual V.E. observation. The waiver request shall 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.

       The waiving of the annual (Method 9) visible emissions monitoring requirement does not absolve the permittee from any monthly (Method 9 or Ringlemann chart) visible emissions monitoring requirements. Monthly visible emissions monitoring requirements shall be performed in accordance with Attachment IIA, Special Condition C.11.a.

    (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-32, §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 Conditions, Conditions 16, 17, and 25, respectively.

    a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
    b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*

c. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

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

2. The permittee shall provide a written report for any deviation from the permit requirements. The written report shall be submitted **within five (5) working days** of the deviation and must contain the information requested in HAR Subsection 11-60.1-16. 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, §11-60.1-16, §11-60.1-90)

3. Performance Testing

a. **At least thirty (30) days prior** to conducting a source performance test required by Special Condition E.1. of this Attachment, the permittee shall submit a source test plan notifying the Department of Health of the event and the procedures for the test.

b. **Within sixty (60) days after** completion of a source performance test, the permittee shall submit the test results as specified in Special Condition E.1. of this Attachment.

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

4. The permittee shall submit a written report of all excess emissions measured by the CEMS operating on unit nos. M12 and M13 to the Department of Health for **every calendar quarter**. The report shall include the following:

a. The magnitude of excess emissions computed in accordance with 40 CFR Part 60 Section 60.13(h), any conversion factors used, and the date and time of commencement, completion of each time period of excess emissions, and the corresponding operating load of the diesel engine generators.

b. Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and malfunctions of the diesel engine generators. The nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted, shall also be reported.

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

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

e. All reports shall be postmarked **by the 30th day** following the end of each calendar quarter. The enclosed Excess Emissions and Monitoring System Performance Summary Report form shall be used in conjunction with the reporting of excess emissions of NO_X.

f. For purposes of this Covered Source Permit, excess emissions shall be defined as any three (3) hour period during which the average emissions of NO_X, as measured by the CEMS, exceed the emission limits set forth in Special Condition B.3.a. of this Attachment.

g. Excess emissions indicated by the CEMS shall be considered violations of the applicable emission limit for the purposes of this Covered Source Permit except during the start-up and shutdown periods of the diesel engine generators.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, and 40 CFR Part 60.13 and Appendices A, B and F)

5. The permittee shall submit **semi-annually** the following written reports to the Department of Health. The report shall be submitted **within sixty (60) days after** *the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)*, and shall be signed and dated by an authorized representative.

a. Total hours of operation by month for unit nos. X1, X2, and SG1 along with the 12-month rolling average. The enclosed Monitoring Report Form, *Operating Hours,* shall be used in reporting the hours of operation.

b. Any deviations from the permit requirements shall be clearly identified. At a minimum, report coverage shall include the information requested in HAR § 11-60.1-16(b).

c. Verification of the flow rate of fuel burned in unit nos. M10 and M11 in gallons per hour. The enclosed Monitoring Report Forms, *Fuel Consumption* and *Operating Hours,* shall be used in reporting the fuel consumption rate.

d. The used oil analysis which indicated exceedences of the limits specified in Special Condition No. B.7.c. of this Attachment. If there were no exceedences, the permittee shall submit in writing a statement indicating that there were no exceedences for that semi-annual period.

e. The hourly used oil consumption rates that exceeded the limits specified in Special Condition B.7.f. of this Attachment. If here were no exceedences, the permittee shall submit in writing a statement indicating that there were no exceedences for that semi-annual period.

f. The total amount of used oil consumed. The attached Monitoring Report Form, Spec *Used Oil Consumption*, shall be used.

g. Any opacity exceedences as determined by the required V.E. monitoring. Each exceedence reported shall include the date, six (6) minute average opacity reading, possible reason for exceedence, duration of exceedence, and corrective actions taken. If there were no exceedences, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedences for that semi-annual period. The attached Monitoring Report Form: *Visible Emissions* shall be used.

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

6. Compliance Certification.

a. During the permit term, the permittee shall submit at least annually to the Department of Health and USEPA Region 9, Compliance Certification Form pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

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

ii. The compliance status;

iii. Whether compliance was continuous or intermittent;

iv. The methods used for determining the compliance status of the source currently and over the reporting period;

v. 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

vi. Any additional information as required by the Department of Health, 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 the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

7. Annual Emissions.

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

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

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

8. The permittee shall provide written notification **within five (5) working days** after the fuel injection timing retard (FITR) on unit nos. M12 and M13 has been changed.

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

Section E. Testing Requirements

1. **On an annual basis,** the permittee shall conduct or cause to be conducted the following performance tests. All performance tests shall be conducted at 100 percent operating load and at other operating loads identified in this permit or as may be specified by the Department of Health. The tests shall be conducted on an annual basis and at such other times as may be specified by the Department of Health.

   a. Diesel Engine Generators, unit nos. M10 and M11
      The permittee shall conduct performance tests for NO_X (as NO_2) and CO.

   b. Diesel Engine Generators, unit nos. X1 and X2
      The permittee shall conduct performance tests for NO_X.

   c. Diesel Engine Generators, unit nos. M12 and M13
      The permittee shall conduct performance tests for NO_X (as NO_2), SO_2, CO, VOC, and PM.

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

2. Performance tests for the emissions of NO_X (as NO_2),SO_2, CO, VOC, and PM, shall be conducted and results reported in accordance with the test methods set forth in 40 CFR Part 60 Appendix A and 40 CFR Part 60.8. In the absence of U.S. EPA-approved test methods, alternative test methods may be used with prior written approval from the Department of Health.

   a. Performance tests for the emissions of NO_X shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 7;

b. Performance tests for the emissions of SO_2 shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 6;

c. Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 10;

d. Performance tests for the emissions of VOC shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 25A and

e. Performance tests for the emissions of PM shall be conducted using 40 CFR Part 60 Methods 1 to 5.

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

3. Performance Test Plan.

At least 30 calendar days prior *to performing a test*, the permittee shall submit to the Department of Health, a performance test plan detailing methods and procedures to be used. Such a plan shall conform to USEPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

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

4. The permittee, at its own expense, shall install and provide the necessary ports in the stacks or ducts and other safe and proper sampling and testing facilities as may be necessary for the determination of the air pollutant emissions.

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

5. 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 §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

6. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests. All deviations must conform to USEPA guidelines and must be clearly identified in the performance test plan submitted pursuant to Special Condition E.3. of this Attachment.

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

7. Performance Test Report

   Within sixty (60) days after *completion of the performance test*, the permittee shall submit to the Department of Health and U.S. EPA Region 9 a performance test report which includes the operating conditions of the diesel engine generators 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; SIP §11-60-15)[2]

8. Performance Test Waiver.

   Upon written request and justification, the Department of Health may waive the requirement for a specific annual performance test required by Special Condition E.1. of this Attachment. Such a request would need to be justified on the grounds that prior tests had shown compliance by a wide margin and that adequate alternative means exist to show continuing compliance.

   The waiver request shall be submitted prior to the required performance test and must include documentation justifying such action. Documentation shall include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, a statement that the emission unit has not had a major malfunction or undergone a major overhaul since the previous performance test, and a statement that the operations of the source have not changed since the previous performance test.

   (Auth.: HAR §11-60.1-3, §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)

---

[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.

PROPOSED

ATTACHMENT IIB: SPECIAL CONDITIONS FOR COMBUSTION TURBINES
COVERED SOURCE PERMIT NO. 0067-02-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 Attachment encompasses the following equipment and associated appurtenances:

Unit	Description
M14	One (1) 20 MW General Electric Combustion Turbine, model no. LM 2500, 275 MMBtu/hr;
M15	One (1) Heat Recovery Steam Generator
M16	One (1) 20 MW General Electric Combustion Turbine, model no. LM 2500, 275 MMBtu/hr;

(Auth.: HAR §11-60.1-3)

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

(Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. The combustion turbine generators unit nos. M14 and M16 are subject to the provisions of the following federal regulations:

   a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A - General Provisions.

   b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart GG - Standards of Performance for Stationary Gas Turbines.

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

2. The permittee shall comply with all applicable provisions of these standards, including all emission limits, notification, testing, monitoring, and reporting requirements. 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 §60.1, §60.330)[1]

Section C. Operational and Emission Limitations

1. "Start-up" and "Shutdown"

   a. The "start-up" period for any combustion turbine generator shall not exceed twenty (20) minutes in simple cycle mode and shall not exceed sixty (60) minutes in combined cycle mode. The "start-up" period shall be from the time fuel use at the combustion turbine generator begins, until the time the combustion turbine generator is operating at 25 percent load or more of the rated capacity (peakload) for more than fifteen (15) consecutive minutes.

   b. The "shutdown" period for any combustion turbine generator shall not exceed twenty (20) minutes. A shutdown sequence shall be considered from the time when the combustion turbine generator is below 25 percent peakload, until fuel use at the combustion turbine generator ceases.

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

2. Minimum Operating Load.

   Except during combustion turbine generator start-up and shutdown, the minimum combustion turbine generator load shall not be less than 25 percent peakload.

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

3. Air Pollution Control Equipment.

   a. The permittee shall continuously operate and maintain a combustor water injection system to meet the emission limits as specified in Special Condition C.5. of this Attachment. The combustor water injection system shall be fully operational upon start-up of the combustion turbine generators.

      i. The system shall commence operation:

         (1) Within twenty (20) minutes of start-up of the combustion turbine operating in simple cycle mode; and

         (2) Within sixty (60) minutes of start-up of the combustion turbine operating in the combined cycle mode.

      ii. The system shall continue to operate to within twenty (20) minutes of shutdown of the combustion turbine. The operation of the combustor water injection system shall be used whenever the combustion turbine is operating at 25 percent peakload and above. The minimum water-to-fuel mass ratio shall be as follows:

Combustion Turbine, % peakload	lb-water/lb-fuel
100	1.04
75 - < 100	0.94
50 - < 75	0.87
25 - < 50	0.72

The averaging periods for the minimum water-to-fuel mass ratios shall be as follows:

(1) For constant loads, where the minimum water-to-fuel mass ratio is not load-adjusted for at least sixty consecutive minutes, a sixty-minute averaging period shall be used.

(2) For variable loads, where the minimum water-to-fuel mass ratio is load-adjusted within sixty consecutive minutes of a previous load-adjustment, a six-minute averaging period shall be used.

b. The use of an alternative control system other than those specified above is contingent upon receiving the Department's written approval to use such a system and shall not relieve the permittee from the responsibility to meet all emission limitations contained within this Covered Source Permit.

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

4. Fuel Specifications

a. The combustion turbine generators shall be fired only on diesel fuel no. 2 with a maximum sulfur content not to exceed 0.4 percent by weight, or alternative fuel allowed under Special Condition C.7.b of this Attachment.

b. The combustion turbine generators shall be fired only on diesel fuel no. 2 with a maximum nitrogen content not to exceed 0.015 percent by weight, or alternative fuel allowed under Special Condition C.7.b of this Attachment.

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

5. Maximum Emission Limit

Except for the combustion turbine generator's start-up and shutdown periods, the permittee shall not discharge or cause the discharge into the atmosphere from each of the combustion turbine generators, NO_X, SO_2, PM, CO, and VOCs in excess of the following specified limits:

PROPOSED

COMBUSTION TURBINE GENERATORS, UNIT NOS. M14 AND M16, SIMPLE CYCLE MODE

Compound	Maximum Emission Limit (3-hour Average) [a]	
	(lbs/hr)	(ppmvd @ 15 % O_2)
Nitrogen Oxides [b]	42.3	42
Sulfur Dioxide	110.0	79
PM/PM_{10} [e]	19.7	0.045 [c]
Carbon Monoxide		
100% peakload	26.8	44
75% - <100% peakload	56.4	123
50% - <75% peakload	181.0	566
25% - <50% peakload	475.6	2,386
Volatile Organic Compounds [d]		
100% peakload	0.8	2.5
75% - <100% peakload	2.6	11.8
50% - <75% peakload	28.1	178.0
25% - <50% peakload	297.6	3,025.0

[a] Emission limit per combustion turbine generator.
[b] Measured as nitrogen dioxide (NO_2).
[c] gr/dscf @ 12 % carbon dioxide (CO_2).
[d] Calculated with a molecular weight of 13.83.
[e] PM_{10} = PM

COMBUSTION TURBINE GENERATORS, UNIT NOS. M14 AND M16, COMBINED CYCLE MODE

Compound	Maximum Emission Limit (3-hour Average) [a]	
	(lbs/hr)	(ppmvd @ 15 % O_2)
Nitrogen Oxides [b]	42.3	42
Sulfur Dioxide	110.0	79
PM/PM_{10} [e]	19.7	0.045
Carbon Monoxide		
100% peakload	26.9	44
75% - <100% peakload	50.2	105
50% - <75% peakload	170.4	523
25% - <50% peakload	457.4	2,219
Volatile Organic Compounds [d]		
100% peakload	0.8	2.5
75% - <100% peakload	2.0	8.6
50% - <75% peakload	25.0	156.0
25% - <50% peakload	271.0	2,662.0

[a] Emission limit per combustion turbine generator.
[b] Measured as nitrogen dioxide (NO_2).
[c] gr/dscf @ 12 % carbon dioxide (CO_2).
[d] Calculated with a molecular weight of 13.83.
[e] PM_{10} = PM

a. Emissions, averaged over any rolling three-hour period, shall not exceed the limits as specified in the table above, except during the combustion turbine generator's start-up or shutdown periods. The three-hour averaging period shall begin immediately after the combustion turbine generator's start-up period, and end immediately prior to the combustion turbine generator's shutdown period. "Start-up" and "shutdown" periods are as defined in Section C, Condition 1.

b. The Department of Health, with USEPA concurrence, may revise the allowable emission limitation for NO_X, SO_2, PM, CO and VOC after reviewing the annual performance test results required under this Attachment, Section F.

c. If NO_X, SO_2, PM, CO and VOC emission limits are revised, the difference between the applicable emission limits set forth above and the revised lower emission limit shall not be allowed as an emission offset for future construction or modification.

d. The Department of Health, with USEPA concurrence, may revise the operating water-to-fuel ratios if findings through operating parameters and performance test results show an optimum operating range which minimizes emissions.

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

6. Opacity Limits

For any six (6) minute averaging period, the combustion turbine generators shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during start-up, shutdown, or equipment breakdown, the combustion turbine generators 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)

7. Alternate Operating Scenarios.

Terms and conditions for alternate operating scenarios are as follows:

a. The permittee may replace the combustion turbines 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 combustion turbines from its site and the following provisions are adhered to:

i. Written notification identifying the reasons for the replacement from the site of operation is submitted to and approved by the Department of Health prior to the exchange;

ii. The unit is replaced with a combustion turbine of the same make, model, and size;

iii. The temporary replacement unit complies with all applicable conditions including all air pollution control equipment requirements, operating restrictions and emission limits;

iv. The combustion turbine shall be repaired and returned to service at the same location in a timely manner; and

v. Prior to the removal and return of any combustion turbine, the permittee shall submit to the Department of Health 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. Upon receiving written approval from the Department of Health, the permittee may burn an alternative fuel provided the permittee demonstrates compliance with all applicable state and federal requirements and applicable conditions of this covered source permit. The alternative fuel shall be burned only temporarily, and shall not result in an increase in emissions of any air pollutant or in the emission of any air pollutant not previously emitted. The permittee shall not be allowed to switch fuels unless all of the following information is provided:

i. Specific type of fuel provided:
ii. Consumption rate of the fuel:
iii. Fuel blending rate;
iv. Emissions calculations;
v. Ambient air quality analyses verifying that SAAQS will be met;
vi. Fuel storage; and
vii. Plan to monitor and record the fuel analyses and consumption.

c. The permittee may use fuel additives to reduce corrosion, control biological growth, and enhance combustion. Additives used during this scenario shall not affect emission estimates.

d. 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 Department of Health, submit written notification to the Department of Health.

e. The terms and conditions under each alternate operating scenario shall meet all applicable requirements including conditions of this permit.

f. During emergency load conditions, unit nos. M14 or M16 may operate up to 110 percent peakload. Emergency load conditions shall be defined as the sudden loss of a power generating unit due to equipment malfunction or breakdown. The operation of unit nos. M14 or M16 over 100 percent peakload shall not exceed thirty (30) minutes in duration and shall not exceed the emission limits specified in Special Condition C.5. of this Attachment. The permittee shall record in a log the date, time, and the duration unit nos. M14 and M16 operated under this scenario. The log shall also identify the nature and the power generating units that cause the emergency load condition.

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

8. Potential sources of fugitive emissions in fuel oil transfer systems shall be inspected and maintained on a regular schedule to minimize fugitive VOC emissions.

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

9. Demonstration Project

a. The permittee shall provide sufficient space for the installation of a selective catalytic reduction (SCR) system in the design of Maalaea unit nos. 14 and 16.

b. In conjunction with the demonstration project, an independent consultant, mutually acceptable to the permittee and the Department of Health shall be retained to undertake an analysis of alternative technologies to control emissions of NOx including the latest results of the demonstration project, SCR and dry low NOx combustion technologies. The analysis will assess the availability and feasibility of the alternative technologies on a worldwide basis, and will assess the energy, environmental (including ambient air quality benefits) and economic impacts, and other costs associated with the use of each technology at Maalaea unit nos. 14 and 16. The analysis shall be funded by the permittee and will be conducted under the supervision of the Department of Health. The permittee shall have the opportunity to assist in preparing the scope of work for the analysis and through the Department of Health to review and comment upon the work product prior to the completion and acceptance by the Department of Health.

c. The Department of Health and the USEPA shall review the results of the demonstration project and the analysis of alternative control technologies based on the criteria specified in Special Condition C.9.b. of this Attachment. Based on this review, the Department of Health may require the permittee to use at Maalaea unit nos. 14 and 16 either the SCR system or an alternative control technology if demonstrated to be technically feasible and if supported by the results of the analysis prepared in accordance with the criteria specified in Special Condition C.9.b. of this Attachment. In this event, the Department of Health with the USEPA concurrence may revise this Covered Source Permit to reflect the new lower emission rates and operating parameters associated with the alternative control technology.

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

PROPOSED

Section D. Monitoring and Recordkeeping Requirements

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

1. The permittee shall, at its own expense, operate and maintain the following continuous monitoring systems for each combustion turbine generator to measure and record the following parameters or data. The associate date and time of the monitored data shall also be recorded.

    a. Operating load, in MW, of each combustion turbine generator;

    b. Water-to-fuel ratio. The water monitor/recorder shall be accurate to $\pm$5 percent;

    c. The permittee shall operate and maintain a continuous monitoring system to measure and record the NO_X (as NO_2), CO, and the CO_2 or O_2 concentrations in the stack gases from the combustion turbine. If a CO_2 CEM is used, 40 CFR 60, Appendix A, Method 20, Equations 20-2 and 20-5 shall be utilized. The system shall meet USEPA performance specifications (40 CFR Part 60 Section 60.13 and 40 CFR Part 60, Appendix B, and 40 CFR Part 60, Appendix F). The emission rates for NO_X and CO shall be recorded in ppmvd at 15 percent O_2 and lb/hr; and

    d. Opacity levels of stack emissions using a transmissometer continuous monitoring system. The systems shall meet USEPA monitoring performance standards (40 CFR Part 60 Section 60.13 and 40 CFR Part 60, Appendix B, Performance Specifications).

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

2. Daily start-up and shutdown times.

    The start and end times of each sequence shall be recorded. In addition the operating load (MW) at which the air pollution control equipment was initiated and terminated shall be recorded.

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

3. Fuel Specifications.

    a. Sulfur Content in the Fuel.

        The sulfur content of the fuel to be fired in the equipment shall be tested in accordance with the most current American Society for Testing and Materials (ASTM) methods. ASTM Method D4294-90 is a suitable alternative to Method D129-91 for determining the sulfur content. The fuel sulfur content shall be verified by both of the following methods:

i. A representative sample of each batch of fuel received shall be analyzed for its sulfur content; and

ii. A certificate of analysis on the sulfur content shall be obtained for the fuel delivered by the supplier.

b. Nitrogen Content in the Fuel.

The fuel bound nitrogen content of the fuel fired in the combustion turbine generators shall be verified by taking and analyzing a representative sample of each batch of fuel received to determine the nitrogen content by weight.

c. Records of the sulfur and nitrogen contents of the fuel shall be maintained on a monthly basis.

d. Total Fuel Usage

Records on the total amount (gallons) and type of fuel fired in each of the combustion turbine generators shall be maintained on a daily and monthly basis. The fuel usage rate (gallon/hr) shall be measured using a non-resetting volumetric flow metering system.

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

4. The permittee shall maintain records of all fuel deliveries. The records shall include, at a minimum, the receipts of fuel deliveries identifying the delivery dates, the type and amount of fuel received, and the supplier's certificate showing the sulfur content analysis of the fuel delivered.

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

5. Performance Test

Annual source performance test shall be conducted pursuant to Section F of this Attachment. Records of test summaries and results shall be maintained in a permanent form suitable for inspection.

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

6. Inspection, Maintenance, and Repair Log

The permittee shall maintain records on inspections, maintenance, and any repair work conducted on the diesel engine generators. 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)

PROPOSED

Section E. Notification and Reporting Requirements

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

   a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*

   b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*

   c. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

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

2. The permittee shall provide a written report for any deviation from the permit requirements. The written report shall be submitted **within five (5) working days** of the deviation and must contain the information requested in HAR Subsection 11-60.1-16. 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, §11-60.1-16, §11-60.1-90)

3. Performance Testing

   a. **At least thirty (30) days prior** to conducting a source performance test required by Special Condition F.1. of this Attachment, the permittee shall submit a source test plan notifying the Department of Health of the event and the procedures for the test.

   b. **Within sixty (60) days after** completion of a source performance test, the permittee shall submit the test results as specified in Special Condition F.5. of this Attachment.

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

4. Excess Emissions

   The permittee shall submit a written report of all excess emissions to the Department of Health for **every calendar quarter**. The report shall include the following:

   a. The magnitude of excess emissions computed in accordance with 40 CFR Part 60 Section 60.13(h), any conversion factors used, and the date and time of commencement, completion of each time period of excess emissions, and the corresponding operating load of the combustion turbine generators.

   b. Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and malfunctions of the combustion turbine generators. The nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted, shall also be reported.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described.

d. The report shall so state if no excess emissions has 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.

e. All reports shall be postmarked **by the 30th day** following the end of each calendar quarter. The enclosed Excess Emissions and Monitoring System Performance Summary Report form shall be used in conjunction to the reporting of excess emissions of NO_X, CO, and opacity.

f. For purposes of this Covered Source Permit, excess emissions shall be defined as follows:

   i. Any three (3) hour period during which the average emissions of NO_X and CO, as measured by the continuous monitoring system, exceed the emission limits set forth in Special Condition C.5. of this Attachment.

   ii. Any one (1) hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio at the corresponding operating load specified in Special Condition C.3.a. of this Attachment.

   iii. Any opacity measurements, as measured by the transmissometer continuous monitoring system, exceeding the opacity limits and corresponding averaging times set forth in Special Condition C.6. of this Attachment.

g. Excess emissions indicated by the continuous emission monitoring system shall be considered violations of the applicable emission limit for the purposes of the permit with the following exceptions:

   i. during the appropriate twenty (20) minute or sixty (60) minute start-up period of the combustion turbine generators;

   ii. during the twenty (20) minute shutdown period of the combustion turbine generators;

   iii. Opacity measurements, as measured by the transmissometer continuous monitoring system; and

   iv. NO_X emissions in excess of 42 ppm at 15 percent O_2, if it can be shown that the excess emissions resulted from the firing of diesel fuel no. 2 with a fuel-bound nitrogen content in excess of 0.015 percent by weight nitrogen.

h. The permittee shall furnish the Department of Health with a written report of the results of such test for every calendar quarter, by the end of the following month.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

5. Water-to-Fuel Ratio.

   The permittee shall submit **every calendar quarter** to the Department of Health the date, time, duration, and water-to-fuel ratios of the combustion turbine generators as recorded by the water-to-fuel ratio continuous monitoring system, which did not comply with the requirements of Special Condition C.3.a. of this Attachment. If the water-to-fuel ratio was in compliance with the requirements, the permittee shall submit a written statement indicating such for that calendar quarter.

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

6. The permittee shall submit **semi-annually** the following written reports to the Department of Health. 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.

   a. Monthly summary showing the daily start-up and shutdown times and duration sequence of each combustion turbine generator. Include the associated load (MW) of the combustion turbine generators at the start-up and termination of the air pollution control device. Include total operating hours per day and the total operating hours by month for each combustion turbine generator. The enclosed Daily Start-up and Shutdown Monitoring Form (or other similar format form) shall be used in reporting the combustion turbine generator's start-up and shutdown sequence.

   b. Minimum combustion turbine generator load. Except for the combustion turbine generator's start-up and shutdown sequence, report all periods of time (date, time, and duration) when the minimum operating load for each turbine is less than 25 percent peakload.

   c. Summary of the occurrence and duration of any malfunction in the operation of the combustion turbine generators and air pollution control device which resulted in excess emissions, and the corrective actions taken.

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

7. Compliance Certification.

   a. During the permit term, the permittee shall submit at least annually to the Department of Health and USEPA Region 9, the Compliance Certification Form pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

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

      ii. The compliance status;

      iii. Whether compliance was continuous or intermittent;

iv. The methods used for determining the compliance status of the source currently and over the reporting period;

v. 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

vi. Any additional information as required by the Department of Health, 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 the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-86, §11-60.1-90)

8. Annual Emissions.

As required by Attachment IV and in conjunction with the requirements of Attachment III 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 enclosed Annual Emissions Report Forms shall be used.

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

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

Section F. Testing Requirements

1. **On an annual basis,** the permittee shall conduct or cause to be conducted performance tests on unit nos. M14 and M16. Performance tests on the combustion turbines operating in the simple and combined cycle modes shall be conducted for NO_X (as NO_2), SO_2, CO, PM and VOCs. All performance tests shall be conducted at 25 percent, 50 percent, 75 percent, and 100 percent peakload of the combustion turbines and at other operating loads as may be specified by the Department of Health. The tests shall be conducted on an annual basis and at such other times as may be specified by the Department of Health. The Department of Health may define a specific water-to-fuel injection ratio for which the performance test will be conducted.

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

2. Performance tests conducted for the emissions of NO_X (as NO_2), SO_2, CO, VOC and PM, shall be conducted and results reported in accordance with the test methods set forth in 40 CFR Appendix A and 40 CFR Part 60.8. The following test methods of USEPA approved equivalent test methods with written consent from the Department of Health shall be used. Alternative test methods may be used with prior written approval from the Department of Health.

    a. Performance tests for the emissions of NO_X shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 20;

    b. Performance tests for the emissions of SO_2 shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 20;

    c. Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 10;

    d. Performance tests for the emissions of VOC shall be conducted using 40 CFR Part 60 Methods 1 to 4 and 25A and

    e. Performance tests for the emissions of PM shall be conducted using 40 CFR Part 60 Methods 1 to 5.

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

3. Performance Test Plan.

    At least 30 calendar days prior *to performing a test*, the permittee shall submit to the Department of Health, a performance test plan detailing methods and procedures to be used. Such a plan shall conform to USEPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

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

4. The permittee, at its own expense, shall install and provide the necessary ports in the stacks or ducts and other safe and proper sampling and testing facilities as may be necessary for the determination of the air pollutant emissions.

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

5. Performance Test Report

    Within sixty (60) days after *completion of the performance test*, the permittee shall submit to the Department of Health and USEPA Region 9 a performance test report which includes the operating conditions of the combustion turbines 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; SIP §11-60-15)[2]

6. 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 §11-60.1-3, §11-60.1-5, §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 Department of Health before the tests. All deviations must conform to USEPA guidelines and must be clearly identified in the performance test plan submitted pursuant to Special Condition F.3. of this Attachment.

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

8. Performance Test Waiver.

   Upon written request and justification, the Department of Health may waive the requirement for a specific annual performance test required by Special Condition F.1. of this Attachment. Such a request would need to be justified on the grounds that prior tests had shown compliance by a wide margin and that adequate alternative means exist to show continuing compliance.

   The waiver request must be submitted prior to the required performance test and must include documentation justifying such action. Documentation shall include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, a statement that the emission unit has not had a major malfunction or undergone a major overhaul since the previous performance test, and a statement that the operations of the source have not changed since the previous performance test.

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

Section G. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

[1] The 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.

PROPOSED

ATTACHMENT IIC: SPECIAL CONDITIONS FOR INSIGNIFICANT ACTIVITIES
COVERED SOURCE PERMIT NO. 0067-02-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:

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

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

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

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

2. 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.

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

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

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

PROPOSED

ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 00067-02-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 days after** *the end of each calendar year*; and
   b. **Within thirty 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. 0067-02-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 forms:
   Annual Emissions Report Forms: *Diesel Engine* and *Combustion Turbines.*

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

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

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

4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.

5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information by submitting a written request to the Director of Health and clearly identifying the specific information that is to be accorded confidential treatment.

PROPOSED

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0067-02-C

[Issuance Date] **[Expiration Date]**

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

For Period: _____ Date: _____

Facility Name: _____

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

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

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

1. Current permit number: _____
2. Emissions Unit No./Description: _____
3. Identify the permit term(s) or condition(s) that is/are the basis of this certification:

   _____

   _____

   _____

   _____

4. Compliance status during the reporting period:
   a. Has the emissions unit been in compliance with the identified permit term(s) or condition(s)?

      ☐YES ☐NO

   b. If YES, was compliance continuous or intermittent?

      ☐ Continuous ☐ Intermittent

c. If NO, explain.

_____
_____
_____
_____

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

_____
_____
_____
_____

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

_____
_____
_____
_____

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

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

☐ YES ☐ NO

b. If YES, identify those requirements:

_____
_____
_____
_____

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

_____
_____
_____
_____

PROPOSED

DAILY START-UP AND SHUTDOWN MONITORING FORM
COMBUSTION TURBINE GENERATOR
COVERED SOURCE PERMIT NO. 0067-02-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:

COMBUSTION TURBINE GENERATOR UNIT NO. _____								
	Start-up			APC Initiation [1]	Shutdown		APC Shutdown	Operating Hours
Day	Start Time	End Time	Duration [2]	Turbine Load (MW)	Start Time	End Time	Turbine Load (MW)	Hours
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								

PROPOSED

DAILY START-UP AND SHUTDOWN MONITORING FORM
COMBUSTION TURBINE GENERATOR
COVERED SOURCE PERMIT NO. 0067-02-C
(CONTINUED, PAGE 2 OF 2)

[Issuance Date] **[Expiration Date]**

COMBUSTION TURBINE GENERATOR UNIT NO. _____								
	Start-up			APC Initiation [1]	Shutdown		APC Shutdown	Operating Hours
Day	Start Time	End Time	Duration [2]	Turbine Load (MW)	Start Time	End Time	Turbine Load (MW)	Hours
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
TOTAL MONTHLY HOURS:								

[1] APC = Air Pollution Control
[2] Log duration in "Minutes"

PROPOSED

MONITORING REPORT FORM
OPERATING HOURS
COVERED SOURCE PERMIT NO. 0067-02-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.

For Period:_____ Date: _____

Facility Name: MECO Maalaea Generating Station

Equipment Description: _____

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

Serial/ID No.: _____

Type of Fuel: _____ Sulfur (% by weight):_____ Nitrogen (%):_____

Ash (%):_____ Lead (%):_____

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

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature) _____

	TOTAL OPERATING HOURS	ROLLING 12-MONTH AVERAGE	BEGINNING HOUR-METER READING
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTAL			

PROPOSED

ANNUAL EMISSIONS REPORT FORM
DIESEL ENGINES
COVERED SOURCE PERMIT NO. 0067-02-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.

For Period:_____ Date: _____

Facility Name: MECO Maalaea Generating Station

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) _____

_____ MMBTU/Hr. (Maximum Design Heat Input; MM = 1 x 10^6)

_____ kilowatt rating

_____ horse-power rating

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

Types of Fuel:
- Residual Oil: Specify Grade, no. 6, 5, or 4;
- Distillate Oil (no. 2);
- Liquefied Petroleum Gas, Butane, or Propane;
- If Other, specify _____

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

PROPOSED

ANNUAL EMISSIONS REPORT FORM
COMBUSTION TURBINES
COVERED SOURCE PERMIT NO. 0067-02-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.

For Period:_____ Date: _____

Facility Name: MECO Maalaea Generating Station

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) _____

_____ MMBTU/Hr. (Maximum Design Heat Input; MM = 1 x 10^6)

_____ kilowatt rating

_____ horsepower rating

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

Types of Fuel:
- Residual Oil: Specify Grade, no. 6, 5, or 4;
- Distillate Oil (no. 2);
- Liquefied Petroleum Gas, Butane, or Propane;
- If Other _____

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

PROPOSED

MONITORING REPORT FORM
SPEC USED OIL CONSUMPTION
COVERED SOURCE PERMIT NO. 0067-02-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:

For Period:_____ Date: _____

Facility Name: MECO Maalaea Generating Station

Equipment Description: _____ Serial/ID No.: _____

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

Arsenic (ppm): _____ Cadmium (ppm): _____ Chromium (ppm): _____

Lead (ppm): _____ Total Halogens (ppm): _____ Flash Point (°F): _____

PCBs (ppm): _____ Sulfur (% by weight): _____

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	12-MONTH ROLLING AVERAGE	BEGINNING FLOW METER READING	OPERATING HOURS	CONSUMPTION RATE (GPH)
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
TOTAL					

PROPOSED

MONITORING REPORT FORM
FUEL CONSUMPTION
COVERED SOURCE PERMIT NO. 0067-02-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:

For Period:_____ Date: _____

Facility Name: MECO Maalaea Generating Station

Equipment Description: _____

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

Serial/ID No.: _____

Type of Fuel: _____ Sulfur (% by weight):_____ Nitrogen (%):_____

Ash (%):_____ Lead (%):_____

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

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature) _____

MONTH	MONTHLY FUEL CONSUMPTION	12-MO. ROLLING AVERAGE	BEGINNING FLOW METER READING
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTAL			

PROPOSED

EXCESS EMISSION AND MONITORING SYSTEM
PERFORMANCE SUMMARY REPORT
(PAGE 1 OF 2)

Facility Name: Maui Electric Company, Ltd.

Equipment Location: Maalaea Generating Station

Equipment Description:_____

Covered Source Permit No.: **CSP No. 0067-02-C** 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 _____ hours

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. . . . . _____

2. Total CEMS Downtime . . . . . _____

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

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

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.

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature) _____

PROPOSED

MONITORING REPORT FORM
VISIBLE EMISSIONS
COVERED SOURCE PERMIT NO. 0067-02-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:

For Period:_____ Date: _____

Facility Name: MECO Maalaea Generating Station

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) _____

Visible Emissions:
Report the following on the lines provided below all date(s) and six (6) minute average opacity reading(s) which the opacity limit was exceeded during the monthly observations; or if there were no exceedences during the monthly observations, then write no exceedences in the comment column.

EQUIPMENT	SERIAL/ID NO.	DATE	6 MIN. AVER. (%)	COMMENTS

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 Ringlemann'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 Ringlemann's Chart provided. The opacity shall be noted in 5 percent increments (i.e., 25%).

2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.

3. Stand at least three (3) stack heights, but not more than a quarter mile from the stack.

4. Two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment.

5. The six (6) minute average opacity reading shall be calculated for each observation.

6. If possible, the observations shall be performed as follows:

    a. Read from where the line of sight is at right angles to the wind direction.
    b. The line of sight shall not include more than one (1) plume at a time.
    c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
    d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
    e. The equipment shall be operating at maximum permitted capacity.

7. If the equipment was shutdown for that period, briefly explain the reason for shutdown 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.: 0067-02-C

Company Name: Maui Electric Company, Ltd.

Equipment: _____

Fuel: _____

Stack height above ground (ft): _____

Stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

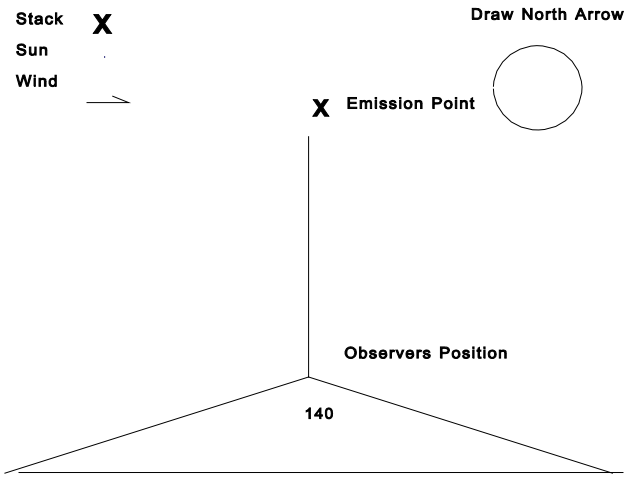
Wind speed (mph): _____

Temperature (°F): _____

Observer Name: _____

Observer Certified? Yes / No

Observation Date and Start Time:_____



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

Observation Date and Start Time:_____

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