LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
File:

July 21, 2010

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(7009 0960 0000 3848 7159)

10-525E CAB
File No. 0317

Mr. Charles K.H. Young
Plant Manager
Mauna Loa Macadamia Nut Corporation,
a subsidiary of The Hershey Company
16-701 Macadamia Road
Keaau, Hawaii 96749-8020

Dear Mr. Young:

Subject: Covered Source Permit (CSP) No. 0317-02-C
Permit Application for Modification No. 0317-05
Mauna Loa Macadamia Nut Corporation
Biomass/Oil Fired Boilers and Diesel Engine Generators
Located at: 16-701 Macadamia Road, Keaau, Hawaii
UTM – 289,428 Meters East and 2,174,789 Meters North (NAD 83)
Date of Expiration: June 27, 2012

The subject covered source permit is issued in accordance with Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information that you submitted as part of your application received on October 9, 2009. The issuance of this permit is also based on the additional information received on April 5 and 26, 2010. The conditions of this permit modification supersede all conditions contained in all prior permits.

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

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

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

Compliance Certification Form
Annual Emissions Report Form: Boilers
Annual Emissions Report Form: Diesel Engine Generators
Monitoring Report Form: Boilers
Monitoring Report Form: Diesel Engine Generators
Monitoring Report Form: Opacity Exceedances
Compliance Report Form (by May 3, 2013): Diesel Engine Generators

The following are for use in visible emissions monitoring:

Visible Emissions Form Requirements State of Hawaii
Visible Emissions Form State of Hawaii; and
The Ringelmann Chart

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

Sincerely,

WILFRED K. NAGAMINE, P.E., ACTING CHIEF
Environmental Management Division

MM:smk

Enclosures

c: Ed Yamamoto, EHS - Hilo
CAB Monitoring Section

ATTACHMENT I: STANDARD CONDITIONS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

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

   (Auth.: HAR §11-60.1-90)

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

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

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

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

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

   (Auth.: HAR §11-60.1-7)

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

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

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

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

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

   (Auth.: HAR §11-60.1-90)

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

    (Auth.: HAR §11-60.1-90)

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

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

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

    (Auth.: HAR §11-60.1-90)

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

    (Auth.: HAR §11-60.1-90)

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

    a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

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

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

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

a. Within eighteen (18) months after the permit takes effect, is discontinued for a period of eighteen (18) months or more, or is not completed within a reasonable time.

b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions, of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

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

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

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

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

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

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

    (Auth.: HAR §11-60.1-93)

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

    (Auth.: HAR §11-60.1-90)

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

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

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

Chief, Permits Office
(Attn: AIR-3)
Air Division
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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[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 – BOILERS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

In addition to the standard conditions of the covered source permit, the following emissions units are subject to the special conditions listed below:

Section A. Equipment Description

1. Attachment IIA of this permit encompasses the following boilers:

   a. Kipper & Sons Engineers, Inc., biomass/oil fired main boiler, serial no. 1174 (25,000 lb/hr steam capacity/35.7 MMBtu/hr with 15 MMBtu/hr Peabody oil burner), equipped with PPC Industries electrostatic precipitator (ESP), job no. 1249, model no. S10-820-1S.

   b. International Boiler Works Co. biomass fired back-up boiler, identification no. 10960, model no. IDH-16 (6,000 lb/hr steam capacity/9.2 MMBtu/hr with 8.1 MMBtu/hr S.T. Johnson oil burner).

   (Auth.: HAR §11-60.1-3)

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

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

Section B. Operational Limitations and Standards

1. Main Boiler Fuel Limits

   a. The main boiler shall only be fired on one (1) or a combination of the following fuels:

      1) Macadamia nut shells (biomass); or
      2) Used oil satisfying the requirements of Attachment IIA, Special Condition No. B.5.d.

   b. The used oil fired by the main boiler shall not exceed 350,000 gallons in any rolling twelve-month (12-month) period.

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

2. Back-up Boiler Fuel Limit

   The back-up boiler shall only be fired on macadamia nut shells (biomass).

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

3. Stack Requirements

   a. The minimum stack height of the main boiler shall be 62 feet above ground level.

   b. The minimum stack height of the back-up boiler shall be 40 feet above ground level.

   c. The exit diameter for the stack exhaust of the back-up boiler may be increased. The maximum exhaust exit diameter for the back-up boiler shall not exceed 10 inches.

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

4. Operation

   Not more than one (1) boiler shall operate at any one time.

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

5. Used Oil

   For firing used oil in the main boiler, the following shall apply:

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

   b. This permit shall not release the permittee from compliance with all applicable state and federal regulations on the handling, transporting, storing, and burning of used oil.

   c. This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if it's declared or determined to be hazardous waste.

   d. The used oil fired by the main boiler shall meet the following limits:

Constituent/Property	Allowable Limit
Sulfur	≤2% by weight
Arsenic	≤5 ppm
Cadmium	≤5 ppm
Chromium	≤10 ppm
Lead	≤300 ppm
Total Halogens	≤1,000 ppm
Flash Point	≥100 ^{o}F
PCBs	< 2 ppm

   e. Used oil for boiler fuel shall be Chlor-D-Tect tested prior to its acceptance.

f. Used oil may be obtained from the following sources within the facility:

1) Plant production gearbox oil; and
2) Diesel engine generator crank case lubricants.

g. Used oil may be obtained from the following external sources:

1) Argo Resources;
2) C&F Trucking;
3) Conen's Freight Transport;
4) Hawaii Electric Light Company (HELCO);
5) Hawaii Petroleum Distributors;
6) Island Princess;
7) Jeff's Auto Body Shop;
8) Kau Agribusiness;
9) Philip Services Hawaii, Ltd.;
10) Unitek;
11) Wayne's Diesel; and
12) Willoks Construction Company.

h. Used oil may be obtained from other sources, provided written notification identifying the new source is submitted prior to written approval by the Department of Health to accept the fuel in accordance with Attachment IIA, Special Condition No. D.4.

i. Used oil shall be sampled and analyzed before transferring the fuel from the receiving tank into the main boiler's dedicated used oil storage tank. The used oil shall not be transferred from the receiving tank to the boiler's dedicated tank unless laboratory analysis indicates the used oil complies with requirements specified in Attachment IIA, Special Condition No. B.5.d. Used oil samples shall be taken in such a manner that sampling is representative of the used oil collected.

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

6. Particulate Emissions Limit

Each boiler shall not exceed emissions of 0.4 pounds of particulate matter per 100 pounds of biomass burned while the boiler is fired on biomass or biomass in combination with used oil.

(Auth.: HAR §11-60.1-3, §11-60.1-36, §11-60.1-90)

7. Opacity Limits

a. For any six (6) minute averaging period, the main boiler shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during start-up,

shutdown, or equipment breakdown, the main boiler may exhibit visible emissions greater than twenty (20) percent opacity, but not exceeding sixty (60) percent opacity, for a period aggregating not more than six (6) minutes in any sixty (60) minute period.

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

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

8. Maintenance

a. Each boiler shall be maintained in good operating condition at all times with scheduled inspection and maintenance as recommended by the manufacturer and as needed.

b. The ESP servicing the main boiler shall be maintained in good operating condition at all times with scheduled inspection and maintenance as recommended by the manufacturer and as needed. Maintenance or servicing shall be performed to correct the secondary output voltage for the ESP, if the secondary voltage is below 22 kV for over two (2) hours when the ESP is operating.

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

9. Additional Requirements

The Department of Health reserves the right to impose additional operational controls, emissions limits, and restrictions if performance testing indicates that additional controls and/or restrictions are necessary.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section C. Monitoring and Record keeping Requirements

1. Records

All records, including support information, shall be maintained at the facility for **at least five (5) years** from the date of the monitoring samples, measurements, tests, reports, or applications. Support information includes all maintenance, inspection, and repair records, and copies of all reports required by this permit. These records shall be true, accurate, and

maintained in a permanent form suitable for inspection and made available to the Department of Health or its representative(s) upon request.

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

2. Boiler Operation

The permittee shall maintain daily records identifying the specific boiler in operation (by model number).

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

3. ESP Secondary Voltage

The secondary (output) voltage of the ESP shall be checked routinely, or at least once per month, to ensure proper collection efficiency for particulate matter and to determine if maintenance is required pursuant to Attachment IIA, Special Condition No. B.8.b.

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

4. Used Oil Verification

a. A representative sample of used oil shall be taken prior to transferring the fuel into the dedicated used oil storage tank and firing the used oil in the main boiler. Each sample shall be submitted in a timely manner to a qualified laboratory to determine compliance with the limits specified in Attachment IIA, Special Condition No. B.5.d. The laboratory analysis of the collected used oil shall be obtained prior to blending it with any fuel oil.

b. The following records shall be maintained on the used oil received:

1) The used oil supplier, date of delivery, and amount for each delivery of used oil received; and
2) The sample date, amount of used oil the sampling represents, date of the used oil analysis, and reports of each used oil analysis.

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

5. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for each boiler and the ESP servicing the main boiler, including verifications of the secondary voltage for the ESP. At a minimum, the following records shall be maintained:

a. The date of the inspection/maintenance/repair work;
b. A description of the part(s) inspected or repaired;

c. A description of the findings and any maintenance or repair work performed;
d. The secondary voltage reading for the ESP for each inspection; and
e. The name and title of the personnel performing inspection/work.

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

6. Biomass Fuel Consumption

The permittee shall operate and maintain an hour meter for each boiler's macadamia nut shell feed conveyor to determine the total tons of macadamia nut shells consumed for purposes of annual emissions reporting and source performance test requirements.

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

7. Used Oil Consumption

a. A non-resetting volumetric fuel flow meter shall be maintained and operated for the main boiler to permanently measure the total gallons of used oil fired for purposes of the fuel limit specified in Attachment IIA, Special Condition No. B.1.b. The non-resetting fuel flow meter shall not allow the manual resetting or other manual adjustments of the meter readings. The installation of any new non-resetting meters or the replacement of any existing non-resetting meters shall be designed to accommodate a minimum of five (5) years of equipment operation, considering any operational limitations, before the meter returns to a zero reading.

b. The following fuel consumption records shall be maintained for firing the main boiler on used oil:

1) Date of each meter reading;
2) Reading at the beginning of each month;
3) Type(s) of fuel fired by the boiler; and
4) Total gallons consumed by the boiler each month and on a twelve-month (12-month) rolling basis.

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

8. Fuel Records

The permittee shall maintain the following fuel consumption records for boiler operation:

a. Identification of used oil generator including company name, mailing address, and phone number;
b. Date that used oil was obtained;
c. Quantity of used oil accepted for each delivery;
d. Type of used oil accepted;

e. Date that used oil was sampled and amount (gallons) sampling represents;
f. Laboratory test results of used oil sampled and analyzed to determine compliance with the requirements specified in Attachment IIA, Special Condition No. B.5.d;
g. Date that the used oil accepted for use was transferred into the 8,000 gallon dedicated used oil storage tank;
h. The total gallons of used oil fired by the main boiler on a monthly and rolling twelve-month (12-month) basis;
i. Total macadamia nut shell feed conveyor hours operated on a monthly basis; and
j. Total tons of macadamia nut shells fired by each boiler on a yearly basis.

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

9. Visible Emissions (VE)

a. Except in those months when VE observations are conducted by a certified reader for the annual observation of each boiler, the permittee shall conduct monthly (calendar month), VE observations of each boiler in accordance with Method 9 or by use of a Ringelmann Chart as provided. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emission Observation Form requirements.

b. The permittee shall conduct annually (calendar year), VE observations for each boiler by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For the annual observation, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emissions Observation Form requirements.

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

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

Section D. Notification and Reporting Requirements

1. Standard Condition Reporting

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

a. Intent to shut down air pollution control equipment for necessary scheduled maintenance;
b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission 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; SIP §11-60-10, §11-60-16)[2]

2. Deviations

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

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

3. Stack Modification

The permittee shall notify the Department of Health in writing of the completion date to increase the back-up boiler's stack exit diameter within fifteen (15) days after the stack modification.

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

4. Used Oil

The permittee shall submit a written request and receive prior written approval from the Department of Health before accepting used oil from another source. For each written request, the permittee shall identify the new source and provide a laboratory report of the used oil that compares results from the used oil analysis to the limits specified in Attachment IIA, Special Condition No. B.5.d. For each used oil analysis, the laboratory report shall indicate the amount of used oil that sampling represents.

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

5. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **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.

Completion and submittal of the **Annual Emissions Report Form: Boilers** shall be used for reporting.

Upon the written request of the permittee, the deadline for reporting 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)

6. Monitoring Reports

The permittee shall submit **semi-annually** written reports to the Department of Health for the boilers. The reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31). The enclosed **Monitoring Report Form: Boilers** and **Monitoring Report Form: Opacity Exceedances**, shall be used for reporting.

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

7. Performance Testing

a. **At least thirty (30) days prior** to conducting a source performance test pursuant to Attachment IIA, Section E, the permittee shall submit to the Department of Health a test plan indicating the date(s) of the scheduled performance test for each boiler as specified in Attachment IIA, Special Condition No. E.3.

b. **Within sixty (60) days after** completion of a source performance test, the permittee shall submit the test results as specified in Attachment IIA, Special Condition No. E.4.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §60.8)[1]

8. Compliance Certification

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

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The methods used for determining the compliance status of the source currently and over the reporting period;

e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act; and
f. Any additional information as required by the Department of Health, including information to determine compliance.

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

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

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

Section E. Testing Requirements

1. Annual Performance Testing

a. **On an annual basis** or at other times as determined by the Department of Health, the permittee shall conduct or cause to be conducted performance testing on the main boiler to determine compliance with the particulate emissions limit specified in Attachment IIA, Special Condition No. B.6.

b. **Within one-hundred eighty (180) days after** increasing the back-up boiler's stack diameter and annually thereafter or at other times as determined by the Department of Health, the permittee shall conduct or cause to be conducted performance testing on the back-up boiler to determine compliance with the particulate emissions limit specified in Attachment IIA, Special Condition No. B.6.

c. Testing for particulate shall be conducted at 90% to 100% of each boiler's rated capacity or at highest achievable load if 90% to 100% of the maximum rated capacity cannot be physically achieved.

d. Testing for particulate shall be conducted for each boiler fired on macadamia nut shells (biomass).

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, SIP §11-60-15; 40 CFR §60.8)[1,2]

2. Test Methods

   a. Performance testing for particulate emissions shall be conducted using 40 CFR Part 60, Appendix A, and 40 CFR §60.8. The following test methods or U.S. EPA approved equivalent methods shall be used:

      1) Method 1 for sample and velocity traverse;
      2) Method 2 for velocity and volumetric flow rate;
      3) Method 3 for gas analysis;
      4) Method 4 for moisture content of stack gases; and
      5) Method 5 for concentration of particulate and moisture content.

   b. Performance tests shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with the permit requirements, the arithmetic mean of the results from the three (3) runs from the filterable portion shall apply. For each test run, the following operation parameters shall be recorded and reported:

      1) The macadamia nut shell feed rate measured in tons per hour for the main and back-up boilers;
      2) Boiler steam rate (lb/hr); and
      3) Secondary voltage reading for ESP servicing the main boiler.

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

      1) Cyclonic or swirling gas flow at the sampling location;
      2) Stack duct with a diameter less than twelve (12) inches or a cross-sectional area less than 113 square inches; and
      3) Sampling location less than two (2) stack or duct diameters downstream or less than a half diameter upstream from a flow disturbance.

   d. For Method 5, the sampling time for each run shall be at least sixty (60) minutes and the minimum sample volume shall be at least thirty (30) dry cubic feet at standard conditions (dscf).

   e. Particulate emissions for Method 5 shall be reported in two (2) categories:

      1) Front half (filter and probe); and
      2) Front and back half (probe, filter, and impingers). When conducting back half clean-up, all connectors and tubing of the back half sampling train up to and including the first impinger shall be properly rinsed. All rinses shall be included in the analysis for back half.

   f. For each run, the particulate emission rate shall be determined by the equation pounds/hour = Qs x cs, where Qs = volumetric flow rate of the total effluent in dscf/hour

as determined in accordance with Method 2, and cs = concentration of particulate in pounds/dscf as determined in accordance with Method 5.

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

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; SIP §11-60-15; 40 CFR §60.8)[1,2]

3. Performance Test Plan

At least thirty (30) days prior to conducting the performance test, the permittee shall submit a written performance test plan to the Department of Health and U.S. EPA, Region 9, that includes test date(s), test duration, test methods, source operation, and any other parameters that may affect the test results. A test 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; 40 CFR §60.8; SIP §11-60-15)[1,2]

4. 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, the test report which includes the operating conditions of the boilers at the time of the test (e.g., steam rate in pounds per hour, macadamia nut shell feed rate in tons per hour, secondary voltage for ESP, etc.), the summarized test results, other pertinent support calculations, and field/laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; SIP §11-60-15)[2]

5. Performance Test Waiver

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

6. Testing Expense and Monitoring

   The permittee shall provide sample and testing facilities at its own expense and the Department of Health may monitor the performance tests.

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-15, §11-60.1-90)

Section F. Agency Notification

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

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

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[1] The citations to the 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 IIB SPECIAL CONDITIONS – DIESEL ENGINE GENERATORS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

Section A. Equipment Description

1. Attachment IIB of this permit encompasses the following equipment:

   a. 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7533, unit no. 4101.

   b. 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7209, unit no. 4102.

   (Auth.: HAR §11-60.1-3)

2. The permittee shall install an identification tag or nameplate on the diesel engine generators listed above which identifies the model no., serial no., and manufacturer. The identification tag or nameplate shall be permanently attached to the equipment at a conspicuous location.

   (Auth.: HAR §11-60.1-5)

Section B. Applicable Federal Regulations

1. The diesel engine generators are subject to the provisions of the following federal regulations:

   a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart A, General Provisions.

   b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

   (Auth.: HAR §11-60.1-3, §11-60.1-90, and §11-60.1-161; 40 CFR §63.6580, §63.6586, §63.6590)[1]

2. The permittee shall comply with all applicable requirements 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)

Section C. Operational and Emission Limitations

1. Fuel Limitations

Each diesel engine generator shall be fired only on fuel oil No. 2 with the following specifications:

a. Maximum sulfur content of 0.5% by weight up through May 31, 2010;
b. Maximum sulfur content of 0.0015% by weight after May 31, 2010; and
c. Minimum cetane index of 40 or maximum aromatic content of 35% after May 31, 2010.

(Auth.: HAR §11-60.1-3, §11.60.1-5, §11.60.1-38, §11-60.1-90, §11-60.1-161; 40 CFR §63.6604)[1]

2. Emission Limits

a. The permittee shall not discharge or cause the discharge of nitrogen oxides (NO_X) as NO_2 from each diesel engine generator in excess of 520 ppmvd corrected at 15% O_2 and 8.6 lb/hr.

b. Except during startup, each diesel engine generator shall comply with either one of the following emission limits no later than May 3, 2013:

1) Limit concentration of CO in the engine exhaust to 49 ppmvd at 15% O_2; or
2) Reduce CO emissions by 70% or more.

c. Performance testing to determine compliance with the applicable emissions limits shall be scheduled in accordance with Attachment IIB, Special Condition No. F.1

d. If using a control device (e.g., oxidation catalyst) to comply with the applicable emissions limit specified in Attachment IIB, Special Condition No. C.2.b:

1) The air pollution control system shall be constructed in accordance with 40 CFR §63.7(d)(1)(i); and
2) The permittee must operate and maintain the air pollution control device in manner to ensure the control device is operating effectively for meeting the applicable emissions limit.

(Auth.: HAR §11-60.1-3, §11.60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §63.7, §63.6603)[1]

3. Operating Limitations

a. The permittee shall install and operate either one of the following control equipment for each diesel engine generator:

1) A closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere; or
2) An open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

b. The permittee shall minimize each diesel engine generator's time spent at idle during startup and minimize the each engine's startup time to a period needed for appropriate and safe loading of each engine, not to exceed 30 minutes, after which time the non-startup emission limits apply as specified in Attachment IIB, Special Condition No. C.2. Engine startup is defined in 40 CFR §63.6675.

c. The permittee must comply with the operating limitations specified in Attachment IIB, Special Condition No. C.3 no later than May 3, 2013 in accordance with 40 CFR §63.6595 and 40 CFR §63.6605.

(Auth.: HAR §11-60.1-3, §11.60.1-5, §11-60.1-90, §11-60.1-161; 40 CFR §63.6595, §63.6605, §63.6625, §63.6675)[1]

4. Visible Emissions

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

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

5. Maintenance

a. Each diesel engine generator, including associated air pollution control equipment and monitoring equipment shall be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions pursuant to 40 CFR §63.6605. The permittee shall follow a regular maintenance schedule to ensure proper operation of each diesel engine generator and associated air pollution control equipment and monitoring equipment.

b. The permitte must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filers.

c. If using a control device (e.g., oxidation catalyst) to comply with the applicable emissions limit specified in Attachment IIB, Special Condition No. C.2.b, the permitte

must follow the manufacturer's specified maintenance requirements for operating and maintaining the air pollution control device.

d. A fuel injection timing retard (FITR) of four (4) degrees shall be maintained at all times for operation of each diesel engine generator.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90; 40 CFR §63.6605, §63.6625)[1]

6. Alternate Operating Scenario

a. The permittee may replace each diesel engine generator with a temporary replacement unit if any repair reasonably warrants the removal of the diesel engine generator from its site (i.e., equipment failure, engine overhaul, or any major equipment problems requiring maintenance for efficient operation), permit requirements for the permitted diesel engine generator do not conflict with those required for the replacement unit, and the following provisions are adhered to:

1) A request for replacing the diesel engine generator with a temporary replacement unit shall be submitted in accordance with Attachment II Special Condition No. E.6.a.
2) The temporary replacement unit must be similar in size to the diesel engine generator being replaced with equal or lesser emissions.
3) The temporary replacement unit shall comply with all applicable conditions required for the primary unit including all air pollution control equipment requirements, operating restrictions, and emission limits.
4) The diesel engine generator shall be repaired and returned to service at the same location in a timely manner.
5) Removal and return information shall be submitted as required by Attachment IIB, Special Condition No. E.6.b.

b. The Department of Health may require an ambient air quality assessment of the temporary unit, and/or provide a conditional approval to impose additional monitoring, testing, recordkeeping, and reporting requirements to ensure the temporary unit is in compliance with the applicable requirements of the permitted unit being temporarily replaced.

c. Records shall be maintained in accordance with Attachment IIB, Special Condition No. D.6.

d. The terms and conditions under each operating scenario shall meet all applicable requirements, including the special conditions of this permit.

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

7. Additional Requirements

The Department of Health reserves the right to impose additional operational controls, emissions limits, and restrictions if performance testing indicates that additional controls and/or restrictions are necessary.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section D. Monitoring and Recordkeeping Requirements

1. Records

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

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

2. Startup

An hour meter shall be operated and maintained for each diesel engine generator to record the duration of each startup sequence. The following shall be recorded for each diesel engine generator startup sequence:

a. Each startup date;
b. The start and end times of each startup sequence; and
c. Duration of each startup sequence in minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §63.6625)

3. Fuel Consumption

Fuel purchase receipts, showing the fuel type, sulfur content (% by weight), cetane index, aromatic content, date of delivery, and amount (gallons) of fuel delivered for each diesel engine generator shall be maintained. Fuel sulfur content may be demonstrated by providing the supplier's fuel specification sheet for the type of fuel purchased and received. Records on the total amount (gallons) of fuel fired by the diesel engine generators shall be maintained for purposes of annual emissions reporting and the applicable fuel limits specified in Attachment IIB, Special Condition No. C.1.

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

4. Inspection, Maintenance, and Repair Log

   a. An inspection, maintenance, and repair log shall be maintained for each diesel engine generator. Records shall include information on FITR setting verifications at times when disassembly of the units allows a determination of the FITR setting (e.g., at overhauls). Records shall also include information on maintenance performed in accordance with Attachment IIB, Special Condition No. D.4.b. At a minimum, the following records shall be maintained:

      1) The date of the inspection/maintenance/repair work;
      2) A description of the part(s) inspected or repaired;
      3) A description of the findings and any maintenance or repair work performed;
      4) The FITR setting after disassembly of each diesel engine generator; and
      5) The name and title of the personnel performing inspection/work.

   b. The permittee shall keep records of the manufacturer's recommended maintenance procedures for the closed crankcase ventilation system, open crankcase filtration system, or any other air pollution control system (e.g., oxidation catalyst) and records of the maintenance performed on the control systems.

   (Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90; 40 CFR §63.6625)[1]

5. Visible Emissions (VE)

   a. Except in those months when VE observations are conducted by a certified reader for the annual observations of each diesel engine generator, the permittee shall conduct monthly (calendar month), VE observations of each diesel engine generator in accordance with Method 9 or by use of a Ringelmann Chart as provided. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emission Observation Form requirements.

   b. The permittee shall conduct annually (calendar year), VE observations for each diesel engine generator by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For the annual observations, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the Visible Emissions Observation Form requirements.

   c. Upon written request and justification by the permittee, the Department of Health may waive the requirement for the annual VE observations of each diesel engine generator. The waiver request is to be submitted prior to the required annual VE observations and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior VE observation indicating compliance by a wide

margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual VE observations.

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

6. Alternate Operating Scenario

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

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

Section E. Notification and Reporting Requirements

1. Standard Condition Reporting

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

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

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)[2]

2. Deviations

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

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

3. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **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 Form: Diesel Engine Generators** shall be used for reporting.

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

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

4. Monitoring Reports

The permittee shall submit **semi-annually** written monitoring reports to the Department of Health and U.S. EPA, Region 9. The reports shall be submitted **within sixty (60)** days after the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31). The enclosed **Monitoring Report Form: Diesel Engine Generators** and **Monitoring Report Form Opacity Exceedances**, shall be used for reporting.

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

5. Compliance Reports

The permittee shall submit semi-annually a written compliance report to the Department of Health and U.S. EPA, Region 9. The first semi-annual report must cover the period beginning on the compliance date that is specified for the diesel engine generators in 40 CFR §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date. The first compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date that follows the first calendar half after the compliance date specified for the diesel engine generators in 40 CFR §63.6595. Each subsequent compliance report must cover each semi-annual reporting period (January 1 – June 30 and July 1 – December 31). Each subsequent compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual calendar period. The enclosed **Compliance Report Form: Diesel Engine Generators (by May 3, 2013)**, shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §63.6645)[1]

6. Alternate Operating Scenario

   a. The permittee shall submit a written request and receive prior written approval from the Department of Health before exchanging a permitted diesel engine generator with a temporary replacement unit. The written request shall identify, at a minimum, the reasons for the replacement of the diesel engine generator from the site of operation and the estimated time period/dates for the temporary replacement, type, size, and manufacturing date of the temporary unit, emissions data, and stack parameters.

b. Prior to the removal and return of the permitted 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 the installed unit.

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

7. Performance Testing

a. **At least thirty (30) days prior** to conducting a source performance test required by Attachment IIB, Special Condition No. F.1.a, the permittee shall submit a source test plan notifying the Department of Health of the event and the procedures for the test. Notification shall be in accordance with Attachment IIB, Special Condition No. F.4.a.

b. **At least sixty (60) days prior** to conducting a source performance test required by Attachment IIB, Special Condition No. F.1.b, the permittee shall submit a source test plan notifying the Department of Health of the event and the procedures for the test. Notification shall be in accordance with Attachment IIB, Special Condition No. F.4.b.

c. **Within sixty (60) days after** completion of a source performance test, the permittee shall submit the test results as specified in Attachment IIB, Special Condition No. F.5.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8; SIP §11-60.1-15)[1,2]

8. Compliance Certification

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

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

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.

d. For the requirements of 40 CFR §63.6645, the first annual compliance certification must cover the period beginning on the compliance date specified for the diesel engine generators in 40 CFR §63.6595 and ending on December 31. Each subsequent compliance certification must cover the annual reporting period from January 1 through December 31. Each compliance certification shall be signed and dated by a responsible official.

e. If complying with the requirements of Attachment IIB, Special Condition No. E.8.d:

1) The first compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for the diesel engine generators in 40 CFR §63.6595;
2) Each subsequent annual compliance certification must be postmarked or delivered no later than January 31; and
3) Attachment IIB, Special Condition Nos. E.8.b and E.8.c are no longer applicable.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90; 40 CFR §63.6645)[1]

Section F. Testing Requirements

1. Performance Testing

a. On an annual basis, or at other times as determined by the Department of Health, the permittee shall conduct or cause to be conducted performance tests on each diesel engine generator for NO_X to determine compliance with Attachment IIB, Special Condition No. C.2.a.

b. The permittee shall conduct an initial performance test on each diesel engine generator within 180 days after May 3, 2013 to determine compliance with the applicable CO emissions limit specified in Attachment IIB, Special Condition No. C.2.b.

c. Testing for NO_X and CO shall be conducted at 90% to 100% of each diesel engine generator's rated capacity or at the highest achievable load if 90% to 100% of the maximum rated capacity cannot be physically achieved.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8, §63.6612; SIP §11-60-15)[1,2]

2. Test Methods for NO_X

   a. Performance testing for NO_X shall be conducted using 40 CFR Part 60, Appendix A and 40 CFR Part 60.8. The following test methods or U.S. EPA approved equivalent methods shall be used:

      1) Method 1 for sample and velocity traverse;
      2) Method 2 for velocity and volumetric flow rate;
      3) Method 3 for gas analysis;
      4) Method 4 for moisture content of stack gases; and
      5) Method 7E for nitrogen oxide emissions.

   b. The performance test for each diesel engine generator shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with permit requirements, the arithmetic mean of the results from the three (3) runs shall apply.

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

      1) Cyclonic or swirling gas flow at the sampling location;
      2) Stack duct with a diameter less than twelve (12) inches or a cross-sectional area less than 113 square inches; and
      3) Sampling location less than two (2) stack or duct diameters downstream or less than half diameter upstream from a flow disturbance.

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

   (Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, SIP §11-60-15; 40 CFR Part 60 Appendix A, 40 CFR §60.8)[1,2]

3. Test Methods for CO

   a. The initial performance testing to determine compliance with the CO emissions limit specified in Attachment IIB, Special Condition C.2.b.1 shall be conducted as follows:

      1) Select a sampling port location and the number of traverse points using Method 1 or 1A of 40 CFR Part 60, Appendix A and 40 CFR §63.7(d)(1)(i). If using a control device, the sampling site must be located at the outlet of the control device.
      2) Determine the O_2 concentration of the exhaust using Method 3 or 3A of 40 CFR Part 60, Appendix A, or ASTM Method D6522-00 (2005).
      3) Measure the moisture content of the exhaust at the sampling port location using Method 4 of 40 CFR Part 60, Appendix A, or Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03.

4) Measure the CO concentration at the diesel engine generator exhaust using Method 10 of 40 CFR Part 60, Appendix A, ASTM D6522-00 (2005), Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03.
5) For measuring the CO concentration, Methods 3A and 10 of 40 CFR Part 60, Appendix A may be used as options to ASTM D6522-00 (2005).
6) The performance test for each diesel engine generator shall consist of three (3) one hour or longer runs using the applicable test method. For the purpose of determining compliance with permit requirements, the arithmetic mean of the results from the three (3) runs shall apply.

b. The initial performance testing to determine compliance with the CO emissions limit specified in Attachment IIB, Special Condition C.2.b.2 shall be conducted as follows:

1) The O_2 concentration shall be measured at the inlet and outlet of the control device with a portable O_2 analyzer using ASTM D6522-00 (2005) (incorporated by reference, see 40 CFR §63.14).
2) The CO concentration shall be measured at the inlet and outlet of the control device with a portable CO analyzer using ASTM D6522-00 (2005) (incorporated by reference, see 40 CFR §63.14). The CO concentration must be at 15% O_2 dry basis.
3) For measuring CO and O_2 concentrations, Methods 3A and 10 of 40 CFR Part 60, Appendix A, Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03 may be used as options to ASTM-D6522-00 (2005).
4) Measurements to determine O_2 concentration shall be made at the same time as measurements for the CO concentration.
5) The performance test for each diesel engine generator shall consist of three (3) one hour or longer runs using the applicable test method. For the purpose of determining compliance with permit requirements, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, SIP §11-60-15; 40 CFR Part 60 Appendix A, 40 CFR §60.8, §63.6612)[1,2]

4. Performance Test Plan

a. **At least thirty (30) days prior** to conducting the performance test for NO_X, the permittee shall submit a written performance test plan to the Department of Health and U.S. EPA, Region 9, that includes date(s) of the test, test duration, test methods, source operation, and any other parameters that may affect the test results. A test plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

b. **At least sixty (60) days** prior to conducting the initial performance test for CO, the permittee shall submit a written performance test plan to the Department of Health and U.S. EPA, Region 9, in accordance with 40 CFR §63.7(b) and 40 CFR §63.7(c).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90; 40 CFR §60.8, §63.7; SIP §11-60-15)[1,2]

5. Performance Test Report

Within sixty (60) days after completion of the performance test for NO_X or CO, the permittee shall submit to the Department of Health and U.S. EPA, Region 9, the test report which includes the operating conditions of the diesel engine generators at the time of the test (e.g., unit's operating load in kW, etc.), the summarized test results, other pertinent support calculations, and field/laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161, SIP §11-60-15)[2]

6. Compliance Report

After conducting the initial CO performance test for the diesel engine generators, notification on whether or not compliance is achieved with the applicable emissions limit shall be reported in accordance with Attachment IIB, Special Condition No. E.5.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161; SIP §11-60-15; 40 CFR 63.6645)[1,2]

7. Performance Test Waiver

Upon written request and justification, the Department of Health may waive the requirement for a specific annual performance test for NO_X as required by Attachment IIB, Special Condition No. F.1.a. The waiver request is to be submitted prior to the required performance test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

8. Testing Expense and Monitoring

The permittee shall provide sample and testing facilities at its own expense and the Department of Health may monitor the performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-15, §11-60.1-90)

Section G. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

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

ATTACHMENT II – INSIG: SPECIAL CONDITIONS – INSIGNIFICANT ACTIVITIES
NONCOVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

Section A. Equipment Description

1. Attachment II – INSIG encompasses the following insignificant activities:

   a. 8,000 gallon diesel Tank No. 1;
   b. 8,000 gallon used oil Tank No. 2;
   c. 8,000 gallon used oil Tank No. 3;
   d. 4,000 gallon used oil Tank No. 4;
   e. 4,000 gallon used oil Tank No. 5
   f. 50 gallon diesel Tank No. 6;
   g. 50 gallon diesel Tank No. 7;
   h. 75 gallon used oil Tank No. 8; and
   i. 75 gallon used oil Tank No. 9.

   (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.

   (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 true, accurate, and

maintained in a permanent form suitable for inspection and made available to the Department of Health or its authorized representative upon request.

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

Section D. Notification and Reporting

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

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

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

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

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

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

Section E. Agency Notification

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

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

ATTACHMENT III: ANNUAL FEE REQUIREMENTS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

The following requirements for the submittal of annual fees are established pursuant to HAR, Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1

1. Annual fees shall be paid in full:

    a. Within **sixty (60) days** after the end of each calendar year; and
    b. Within **thirty (30) days** after the permanent discontinuance of the covered source.

2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.

3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department of Health.

4. The annual fees and the emission data shall be mailed to:

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

ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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 Form: Boilers
   Annual Emissions Report Form: Diesel Engine Generators

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

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

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

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

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

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0317-02-C
PAGE 1 OF ___

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

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

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

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

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0317-02-C
(CONTINUED, PAGE 2 OF ___)

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

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

A. Attachment I, Standard Conditions

Permit term/condition	Equipment	Compliance
All standard conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent

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

Permit term/condition	Equipment	Compliance
All monitoring conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
All recordkeeping conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
All reporting conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
All testing conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent
All INSIG conditions	All Equipment listed in the permit	☐ Continuous ☐ Intermittent

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0317-02-C
(CONTINUED, PAGE ____ OF ___)

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

C. Special Conditions - Operational and Emissions Limitations

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

Permit term/condition	Equipment	Method	Compliance
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent
		☐ monitoring ☐ recordkeeping ☐ reporting ☐ testing ☐ none of the above	☐ Continuous ☐ Intermittent

(Make Additional Copies if Needed)

COMPLIANCE CERTIFICATION FORM
COVERED SOURCE PERMIT NO. 0317-02-C
(CONTINUED, PAGE ___ OF ___)

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

D. Deviations

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

(Make Additional Copies if Needed)

ANNUAL EMISSSIONS REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

(Make Copies for Additional Use)

For Reporting Period:_____ Date:_____

Corporation: Mauna Loa Macadamia Nut Corporation

Facility name: Mauna Loa Macadamia Nut Plant

Equipment:

1) Kipper & Sons Engineers, Inc. biomass/oil fired main boiler serial no. 1174 (25,000 lb/hr steam capacity/35.7 MMBtu/hr with 15 MMBtu/hr Peabody oil burner), equipped with PPC Industries electrostatic precipitator (ESP), job no. 1249, model no. S10-820-1S.

2) The International Boiler Works Co. biomass fired back-up boiler, identification no. 10960, model no. IDH-16 (6,000 lb/hr steam capacity/9.2 MMBtu/hr with 8.1 MMBtu/hr S.T. Johnson oil burner).

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

Responsible Official (print):_____

Title:_____

Responsible Official (signature)_____

MACADAMIA NUT SHELL CONSUMPTION		
Boiler Unit	**Capacity (MMBtu/hr)**	**Total Consumption (tons/year)**
Kipper & Sons Engineers, Inc. Main Boiler	35.7	
International Boiler Works Co. Back-up Boiler	9.2	

USED OIL CONSUMPTION CONSUMPTION			
Boiler Unit	**Capacity (MMBtu/hr)**	**Maximum % Sulfur Content by Weight**	**Total Consumption (gallons/year)**
Kipper & Sons Engineers, Inc. Main Boiler	15		

ANNUAL EMISSIONS REPORT FORM
DIESEL ENGINE GENERATORS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

(Make Copies for Additional Use)

For Reporting Period:_____ Date:_____

Corporation: Mauna Loa Macadamia Nut Corporation

Facility name: Mauna Loa Macadamia Nut Plant

Equipment:

1) 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7533, unit no. 4101.

2) 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7209, unit no. 4102.

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

Responsible Official (print):_____

Title:_____

Responsible Official (signature)_____

FUEL OIL NO. 2 CONSUMPTION			
Diesel Engine Generator Unit	**Capacity (kW)**	**Maximum % Sulfur Content by Weight**	**Total Consumption (gallons/year)**
Caterpillar unit no. 4101	300		
Caterpillar unit no. 4102	300		

MONITORING REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0317-02-C
(PAGE 1 OF 2)

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

(Make Copies for Additional Use)

For Reporting Period:_____ Date:_____

Corporation: Mauna Loa Macadamia Nut Corporation

Facility name: Mauna Loa Macadamia Nut Plant

Equipment:

1) Kipper & Sons Engineers, Inc. biomass/oil fired main boiler serial no. 1174 (25,000 lb/hr steam capacity/35.7 MMBtu/hr with 15 MMBtu/hr Peabody oil burner), equipped with PPC Industries electrostatic precipitator (ESP), job no. 1249 model no. S10-820-1S.

2) The International Boiler Works Co. biomass fired back-up boiler, identification no. 10960 model no. IDH-16 (6,000 lb/hr steam capacity/9.2 MMBtu/hr with 8.1 MMBtu/hr S.T. Johnson oil burner).

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

Responsible Official (print):_____

Title:_____

Responsible Official (signature)_____

1. Identify all incidences when the ESP was not fully functional during operation of the main boiler (eg., when the secondary voltage is less than 22 kV for more than two (2) hours).

Beginning Time and Date	Ending Time and Date	Corrective Action

MONITORING REPORT FORM
BOILERS
COVERED SOURCE PERMIT NO. 0317-02-C
(PAGE 2 OF 2)

(Make Copies for Additional Use)

2. Report the maximum pollutant concentrations in the table below from the used oil fired by the main boiler for the reporting period.

Pollutant	Maximum Concentration (ppm)	Maximum % by Weight	Notes
Sulfur	N/A		
Arsenic		N/A	
Cadmium			
Chromium			
Lead			
Total Halogens			
PCBs			

3. Report all incidents when more than one (1) boiler operated at any one time:

Date	Duration of Simultaneous Operation	Comments

MONITORING REPORT FORM
DIESEL ENGINE GENERATORS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

(Make Copies for Additional Use)

For Reporting Period:_____ Date:_____

Corporation: Mauna Loa Macadamia Nut Corporation

Facility name: Mauna Loa Macadamia Nut Plant

Equipment:

1) 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7533, unit no. 4101.

2) 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7209, unit no. 4102.

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

Responsible Official (print):_____

Title:_____

Responsible Official (signature)_____

1. Report the maximum % by weight sulfur content of the fuel fired by the diesel engine generators for the reporting period.

FUEL OIL NO. 2 CONSUMPTION		
Diesel Engine Generator Unit	**Capacity (kW)**	**Maximum % Sulfur Content by Weight**
Caterpillar unit no. 4101	300	
Caterpillar unit no. 4102	300	

2. Report the maximum % aromatic content or minimum cetane index for the fuel fired by the diesel engine generators for the reporting period.

FUEL OIL NO. 2 CONSUMPTION			
Diesel Engine Generator Unit	**Capacity (kW)**	**Maximum % Aromatic Content**	**Minimum Cetane Index**
Caterpillar unit no. 4101	300		
Caterpillar unit no. 4102	300		

MONITORING REPORT FORM
OPACITY EXCEEDANCES
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

(Make Copies for Additional Use)

For Period: _____ Date: _____

Company/Facility Name: _____

Facility Name: _____

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

Responsible Official (Print): _____

Title: _____

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 exceedances during the monthly observations, then write "no exceedances" in the comment column.

EQUIPMENT or EMISSION POINT DESCRIPTION	SERIAL/ID NO.	DATE	6 MIN. AVER. (%)	COMMENTS

COMPLIANCE REPORT FORM (by May 3, 2013)
DIESEL ENGINE GENERATORS
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

(Make Copies for Additional Use)

Start and End Date of Reporting Period:_____ Date:_____

Corporation: Mauna Loa Macadamia Nut Corporation

Facility name: Mauna Loa Macadamia Nut Plant

Equipment:

1) 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7533, unit no. 4101.

2) 300 kW Caterpillar diesel engine generator, model no. D353TA, serial no. 46B7209, unit no. 4102.

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

Responsible Official (print):_____

Title:_____

Responsible Official (signature):_____

1. If there were no deviations from the applicable emissions or operating limits specified in Attachment IIB, Special Condition Nos. C.2.b and C.3, provide a statement that there were No deviations from the applicable emissions limits or operating limitations:

_____
_____
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COMPLIANCE REPORT FROM (by May 3, 2013)
DIESEL ENGINE GENERATORS
COVERED SOURCE PERMIT NO. 0317-02-C
(CONTINUED PAGE 2 OF 2)

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

2. If there were deviations from the applicable emissions or operating limits specified in Attachment IIB, Special Condition Nos. C.2.b and C.3, provide the applicable information in 40 CFR §63.6650(d):

   a. For diesel engine generator startup, shutdown, or malfunction during the reporting period, attach the applicable information required by 40 CFR 63.10(d)(5)(i).

   b. Report in the table below the total operating time at which the deviation occurred during the reporting period.

Deviation Description	Total Operating Time at Which Deviation Occurred

   c. Provide information in the table below on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

Deviation Description	Number of Deviations	Cause of Deviation

VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

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

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

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

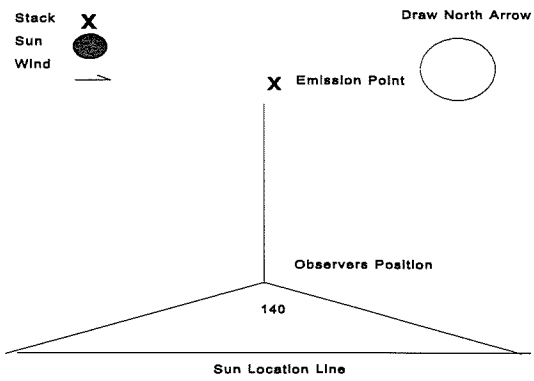
Any required initial and annual performance test performed in accordance with Method 9 by a certified reader shall satisfy the respective equipment's VE monitoring requirements for the month the performance test is performed.

VISIBLE EMISSIONS FORM
COVERED SOURCE PERMIT NO. 0317-02-C

Issuance Date: July 21, 2010 **Expiration Date: June 27, 2012**

(Make Copies for Future Use for Each Stack)

Permit No.: 0317-02-C
Company Name: Mauna Loa Macadamia Nut Corporation
Equipment and Fuel:_____



Site Conditions:

Stack height above ground (ft):_____
Stack distance from observer (ft):_____
Emission color (black or white):_____
Sky conditions (% cloud cover):_____
Wind speed (mph):_____
Temperature (°F):_____
Observer Name:_____
Certified? (Yes/No):_____
Observation Date and Start Time:_____
Method of observation (Ringelmann Chart or Method 9):_____

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

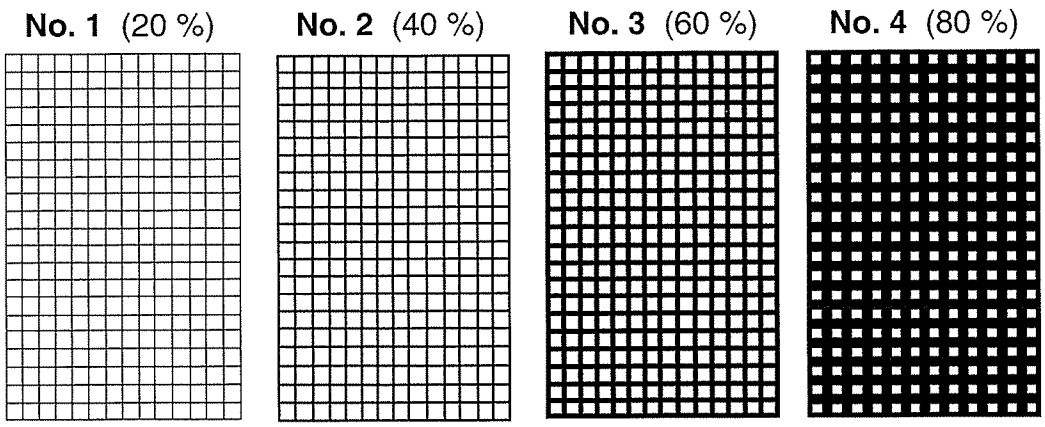
Observation Date and Start Time:_____
Method of observation (Ringelmann Chart or Method 9):_____

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

The Ringelmann Chart

In the late 1800's in Paris, France, Professor Maximilian Ringelmann developed the **Ringelmann Chart** to measure the combustion efficiency of coal-fired boilers. The shade of the smoke plume shows how well a boiler is operating - the poorer its combustion efficiency, the more unburned carbon particles in the smoke and the darker the plume.

Professor Ringelmann's chart established four measured shades of gray between white, valued at zero, and black, at five. These specific shades of gray, Ringelmann No. 1 to Ringelmann No. 4, can be accurately reproduced by placing a grid of black lines of a given width and spacing on a white background. Viewed from a distance, the grid lines and background merge into the shades of gray, to be compared to the shade of the smoke plume.



Ringelmann Chart (not to scale)

Regulating Visible Emissions

The Ringelmann Chart became one of the first tools used to measure visible emissions. Introduced into the United States in 1897, it was soon accepted as the standard measure of smoke density and was used by engineers for power plant testing and smokeless combustion studies. In 1910, the Chart was officially adopted as part of the Smoke Ordinance for Boston, Mass.

Many city, state, and federal regulations now set smoke density limits based on the Ringelmann Smoke Chart. Although not originally designed as a regulatory tool to control air pollution, it gives good practical results when used by well-trained observers.