

PROPOSED

DATE

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

08-XXXE CAB
File No. 0702-01

Mr. Jerry Egami
Senior Vice President
Isemoto Contracting Co. Ltd.
74-5039B Queen Kaahumanu Highway
Kailua-Kona, Hawaii 96740

Dear Mr. Egami:

**Subject: Temporary Covered Source Permit (CSP) No. 0702-01-CT
Initial Application No. 0702-01
Isemoto Contracting Co. Ltd.
350 TPH Mobile Crushing Plant with 275 HP Diesel Engine
Located at: Various Temporary Sites, State of Hawaii
Initial Location: Ka'upulehu-Kona, Hawaii
Date of Expiration: 5 years from Date of Issue**

The subject covered source permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information that you submitted as part your application received on September 22, 2008.

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

Attachment I: Standard Conditions
Attachment II: Special Conditions
Attachment III: Annual Fee Requirements

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

Compliance Certification Form
Change of Location Request for a Temporary Source
Monitoring Report Form: Visible Emissions
Monitoring Report Form: Operating Hours/Fuel Certification

PROPOSED

Mr. Jerry Egami

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The following are for use in monitoring and maintaining records on visible emissions:

Visible Emissions Form – Diesel Engine
Visible Emissions Form – Portable Crushing Plant
The Ringelmann Chart

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

Sincerely,

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

PR:ta

Enclosures

c: Wendell Sano, EHS – Kona
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS
[TEMPORARY] COVERED SOURCE PERMIT NO. 0702-01-CT**

[Issuance Date]

[Expiration Date]

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

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

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

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

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

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

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

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

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

(Auth.: HAR §11-60.1-5, §11-60.1-82)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-90)

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

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

shall also submit, in writing, the following information:

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-11, §11-60.1-90)

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

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

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

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

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

(Auth.: HAR §11-60.1-93)

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

(Auth.: HAR §11-60.1-90)

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

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

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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: SPECIAL CONDITIONS
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

[Issuance Date]

[Expiration Date]

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

Section A. Equipment Description

1. This permit encompasses the following equipment and associated appurtenances for the Portable Crushing Plant:
 - a. One (1) 350 TPH Mobile Jaw Crusher, model no. XA 400 Premiertrak, serial no. 40048DFXA;
 - b. One (1) 275 HP Caterpillar Diesel Engine, model no. C-9, serial no. MBD01447; and
 - c. Water spray system.

2. An identification tag or name plate shall be displayed on the crusher, screen, and diesel engine listed above to show model no., serial no., and manufacturer. The identification tag or name plate shall be permanently attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-3)

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

1. The 350 TPH portable crushing plant is subject to the provisions of the following federal regulations:
 - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
 - b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.1, §60.670)¹

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

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR 60)¹

Section C. Operational and Emission Limits

1. Crushing Operation

- a. The total operating hours of the portable crushing plant, screener, and the diesel engine, shall not exceed 2,080 hours operation in any rolling twelve (12) month period. The permittee shall not operate the crushing plant unless its non-resetting hour meter is recording its hours of operation.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

- b. The permittee shall not cause to be discharged into the atmosphere from any crusher, fugitive emissions which exhibit greater than fifteen (15) percent opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.672)¹

- c. The permittee shall not cause to be discharged into the atmosphere from any transfer point on the belt conveyors or from any other affected facility any fugitive dust emissions which exhibit greater than ten (10) percent opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.672)¹

- d. The portable crushing plant shall be configured to the layout identified in the covered source permit application, or to an alternate configuration meeting the following:

- i. The permittee shall not operate the portable crushing plant in a configuration that would result in an increase in the number of emission points, such as the addition of more transfer or stacking conveyors; and
- ii. The permittee shall not operate the portable crushing plant in a configuration that would cause an increase in the capacity of the process flow.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

- e. The permittee shall take measures to control fugitive dust (e.g., wet suppression, enclosures, dust screens, etc.) at the crusher, material transfer points, stockpiles, and throughout the facility. The Department of Health may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

- f. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions of fugitive dust beyond the lot line of the property boundary on which the emissions originate.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

- g. Water spray bars shall be installed, maintained, and utilized as necessary during operation of the plant to minimize fugitive dust at the following material drop off

points:

- i. At the feeder of the crusher;
- ii. At the exit of the crusher to the finished material conveyor; and
- iii. At the exit of the crusher to the side material conveyor.

The Department of Health at any time may require additional water sprays or manual water spraying at pertinent locations if an inspection indicates that more fugitive dust control is needed.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

- h. The portable crushing plant shall not be operated if observation, or the routine inspection required in Special Condition D.1.b. indicates a significant drop in water pressure and/or flow rate, plugged nozzle(s), leak in the piping system, or other problems which affect the efficiency of its water spray system. The permittee shall investigate and correct the problem before resuming operations.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

- i. A water truck shall be maintained and utilized during the facility's operating hours and at other times as necessary to minimize fugitive dust on haul roads and storage piles.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

2. Diesel Engine

- a. From initial startup of the 275 hp Caterpillar, C9 Tier III diesel engine generator and up through September 30, 2010, the diesel engine generator shall be fired only on diesel fuel no. 2 with:
 - i. A maximum sulfur content of 0.05% by weight; and
 - ii. A cetane index or aromatic content as follows:
 - 1) Minimum cetane index of forty (40); or
 - 2) Maximum aromatic content of thirty-five (35) volume percent.
- b. Beginning October 1, 2010, the diesel engine generator shall be fired only on diesel no. 2 with:
 - i. A maximum sulfur content of 0.0015% by weight; and
 - ii. A cetane index or aromatic content of thirty-five (35) volume percent.
- c. For any six (6) minute averaging period, the diesel engine shall not exhibit visible emissions of twenty (20) percent or greater, except as follows: during start-up, shutdown, or equipment breakdown, the diesel engine may exhibit visible emissions

greater than twenty (20) but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

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

3. Maintenance

The portable crushing plant, including the water spray system and diesel engine shall be maintained in good operating condition at all times with scheduled inspections and maintenance as recommended by the manufacturer, or as needed.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

4. Location Change

a. The operation of the equipment covered by this Temporary Covered Source Permit shall involve at least one (1) location change during the term of this permit.

(Auth.: HAR §11-60.1-81)

b. Subsequent location changes of the portable crushing plant shall be in accordance with Section G, of this Attachment. For each change in location, the Department of Health reserves the right to impose additional operational controls and restrictions if a site evaluation indicates the controls and/or restrictions are necessary.

(Auth.: HAR §11-60.1-81)

c. For each location, the total combined maximum potential emissions from the equipment covered by this Temporary Covered Source Permit and all other stone processing equipment owned or operated by the permittee (i.e., crushers, screens, diesel engines, etc. permitted under other Pineridge Farms, Inc. air permits) shall not exceed the threshold limits for a "major source" as defined in HAR §11-60.1-1.

(Auth.: HAR §11-60.1-81)

5. Alternate Operating Scenario

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

- i. Notification and approval in accordance with Special Condition No. E.6.a.;
- ii. The temporary replacement unit is smaller in size with equal or lesser emissions;
- iii. The temporary replacement unit complies with all applicable conditions including all air pollution control equipment requirements, operating restrictions, and

- emission limits;
 - iv. The diesel engine shall be repaired and returned to service at the same location in a timely manner; and
 - v. Removal and return information is submitted as required by this Attachment, 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 Special Condition No. D.6.; and
- d. The terms and conditions under each operating scenario shall meet all applicable requirements, including special conditions of this permit.

Section D. Monitoring and Recordkeeping Requirements

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

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

1. Water Spray System

- a. A non-resetting water flow meter shall be installed, operated and maintained for the water spray system of the 350 TPH portable crushing plant to determine the cumulative gallons of water used for fugitive dust control and gallon per minute flow rate of the water spray system for the plant.
- b. The water spray system, to include the water pump, piping system, spray nozzles and any gauges (i.e., water pressure, water flow meter, etc.) shall be checked routinely or at least once per week to insure proper operation of the water spray system.

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

2. Visible Emissions (V.E.)

- a. Except in those months where V.E. observations are conducted pursuant to Special Condition No. D.3.c., the permittee shall conduct monthly (calendar month) V.E. observations for the diesel engine in accordance with 40 CFR Part 60, Appendix A,

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 Emissions Observation Form Requirements*.

- b. Except in those months where a performance test is conducted pursuant to Special Condition No. D.4. below, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for the crushing plant. Observations shall be made at emission points subject to an opacity limit, and shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9, or by use of a Ringelmann Chart as provided. For the monthly observation, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each emissions point. For the crushing plant, the observer shall comply with the following additional requirements:
 - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet);
 - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources. The required observer position relative to the sun (Method 9; Section 2.1) shall be followed; and
 - iii. The observer shall record the operating capacity (ton/hr) of the plant at the time the observations were made.

The Department of Health may allow observation of a portion of the total emission points at the crushing plant, if it can be demonstrated that operations have been in compliance with the permit. At a minimum, at least two emission points from the crushing plant shall be observed each month. The selected points for the plant shall include the crusher and a transfer point, or those points as specified by the Department of Health. Allowance to observe a portion of the total required emission points shall be obtained in writing from the Department of Health.

Records shall be completed and maintained in accordance with the *Visible Emissions Observation Form Requirements*.

- c. The permittee shall conduct **annually** (calendar year), V.E. observations for the diesel engine 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 for each emission point. Records shall be completed and maintained in accordance with the *Visible Emissions Observation Form Requirements*.
- d. Upon written request and justification by the permittee, the Department of Health may waive the requirement for the annual V.E. observation of the diesel engine. The waiver request is to be submitted prior to the required annual V.E. observation and must include documentation justifying such action. Documentation should include, but is not limited

to, the results of the prior V.E. observations indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observation.

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

3. Performance Test

Initial and annual source performance tests shall be conducted on the crushing plant pursuant to this Attachment, Section F. Test summaries and results shall be maintained in accordance with the requirements of this section.

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

4. Records

The permittee shall maintain records on the following:

- a. Total tons of material processed by the crushing plant on a monthly and annual basis for purposes of annual emissions reporting. Records shall include the start and end dates the plant is operated at each location, the type (e.g., cinder, gravel, etc.) and the amount of material (tons) processed at each location.
- b. The number of hours the crushing plant operated on a monthly and 12-month rolling basis for purposes of the limitation specified in Special Condition No. C.1.a. For the crushing plant, monthly records shall include:
 - i. Date of meter reading;
 - ii. Identification of crushing plant (list all equipment used in the plant);
 - iii. Beginning and ending meter readings for each month;
 - iv. Total operating hours for each month;
 - v. Total operating hours on a 12-month rolling basis; and
 - vi. Recorder's name and initials.
- c. Fuel purchase receipts, showing the fuel type, sulfur content (percent by weight), date of delivery, and amount (gallons) of fuel delivered to the site for the diesel engine. 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 in the diesel engine shall be maintained on an annual basis.
- d. Monthly and annual V.E. records with observation monitoring results of the crushing plant and diesel engine's stack exhaust in accordance with the "**Visible Emissions Observation Form Requirements.**"
- e. Source performance test plans, summaries, and results for the portable crushing plant.

- f. Equipment inspection, maintenance, and repair work. An inspection, maintenance and repair log shall be maintained for the equipment covered under this permit. Inspection of, and replacement of parts and repairs to the crusher, conveyors, water spray system, and diesel engine, shall be well documented. At a minimum, the following records shall be maintained:
 - i. The date of the inspection/maintenance/repair work;
 - ii. A description of the part(s) inspected or repaired;
 - iii. A description of the findings and any maintenance or repair work performed; and
 - iv. The name and title of the personnel performing inspection/work.

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

5. 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.

Section E. Notification and Reporting Requirements

1. Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 14, 16, 17 and 25, respectively:
 - a. *Anticipated date of initial start-up, actual date of construction commencement, and actual date of start-up;*
 - b. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
 - c. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and*
 - d. *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. The permittee shall report in writing **within five (5) working days** any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional source testing, more frequent monitoring, or the implementation of a corrective action plan.

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

3. Performance Testing

- a. At least **thirty (30) days prior** to conducting a source performance test pursuant to

Special Conditions, Section F, the permittee shall submit a written performance test plan to the Department of Health in accordance with Special Condition No. F.4.

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

- b. Written reports of the results of the source performance tests conducted to demonstrate compliance shall be submitted to the Department of Health **within sixty (60) days after the completion of the performance test**, and shall be in conformance with Special condition No. F.6.

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

4. Compliance Certification

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

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- 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 or authorized representative.*

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

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

5. Monitoring Report

The permittee shall submit **semi-annually** the following written report to the Department of

Health. The report shall be submitted within **sixty (60)** days after the end of each semi-annual calendar period (January 1 – July 7 and July 8 – December 31). The attached **Monitoring Report Form: Operating Hours/Fuel Certification**, shall be used for reporting.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

6. Alternate Operating Scenario

- a. The permittee shall submit a written request and receive prior written approval from the Department of Health before the exchange. The written request shall identify at a minimum the reasons for the replacement of the diesel engine from the site of operation and the estimated time period/dates for the temporary replacement, type and size of the temporary unit, emissions data, and stack parameters.
- b. Prior to the removal and return of the diesel engine, 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.

Section F. Testing Requirements

1. **Within sixty (60) days after achieving the maximum production rate of the crushing plant but not later than one hundred eighty (180) days after initial start-up, and annually** thereafter, the permittee shall conduct or cause to be conducted performance tests on the portable crushing plant to determine the opacity of emissions. Tests shall be conducted for each point subject to an opacity limit.

The Department of Health may require testing at other points in the facility or more frequent testing if an inspection indicates poor or insufficient controls.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; §11-60.1-161, 40 CFR §60.675)¹

2. The performance tests for the portable crushing plant shall be conducted by a certified reader using Method 9 of 40 CFR Part 60, Appendix A, and the procedures in 40 CFR §60.11 with additions identified in 40 CFR Part 60, Subpart OOO, §60.675(c); or U.S. EPA-approved equivalent methods with written consent from the Department of Health. In addition, the observer shall comply with the following requirements:
 - a. The minimum distance between the observed and the emission source shall be 4.57 meters (15 feet); and
 - b. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources. The required observer position relative to the sun (Method 9, Section 2.1) shall be followed.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.675)¹

3. The performance tests shall be made at the expense of the permittee and shall be conducted at the maximum expected operating capacity of the portable crushing plant. All performance tests may be monitored by the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; §11-60.1-161, 40 CFR §60.675)¹

4. **At least thirty (30) days prior to conducting the performance test** for the portable crushing plant, the permittee shall submit a written performance test plan to the Department of Health and the U.S. EPA Region 9 that includes date(s) of the test, test duration, test locations, test methods, source operation, locations of visible emissions readings, and other parameters that may affect the test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

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

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

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

6. **Within sixty (60) days after completion of the performance test** for the portable crushing plant, the permittee shall submit to the Department of Health and U.S. EPA Region 9 the test report which shall include the operating conditions of the facility at the time of the test (e.g., operating rate in tons/hr, water flow rate during the test in gal/min, etc.), locations of where the visible emissions were read, visible emission readings, location of water sprays, summarized test results, comparative results with the permit emission limits, other pertinent support calculations, and field/laboratory data. The results shall be recorded and reported in accordance with 40 CFR Part 60 Appendix A and §60.8 for the portable crushing plant.

The normal operating water flow rate (gal/min) of the water spray system shall be determined by the water flow rate used during the performance test that demonstrates compliance with the opacity limits of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.675; SIP §11-60-15)^{1,2}

7. Upon written request and justification, the Department of Health may waive the requirement for, or a portion of, a specific source performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action.

Documentation should include, but is not limited to, the results of the prior performance test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section G. Change of Location Requirements

1. The permittee shall submit information regarding all location changes for operation of equipment at temporary sites to the Department of Health for approval **at least thirty (30) days**, or such lesser time as designated and approved by the Department of Health; prior to the change in location. The information submitted shall include the following:
 - a. Name, address, phone number of the facility and the plant site manager or other contact;
 - b. Temporary covered source permit number and expiration date;
 - c. Identification of current location;
 - d. Location map of the proposed new temporary location containing the following information:
 - i. Identification of the property and fence lines; and
 - ii. Location of all structures within 325 meters of the equipment. Provide the building dimensions (height, length, and width) of all structures that have heights greater than 40% of the stack height of the equipment.
 - e. List of the equipment to be used at the site and description of the plant configuration;
 - f. Area map showing the proposed new location of the portable crushing plant;
 - g. Projected dates of operation at the new location and the maximum projected operating hours;
 - h. Identification of any other air pollution sources owned or operated by the permittee that are/will be at the new location, or which have operated at or adjacent to the new location within the last twelve (12) months.
 - i. Total combined potential emissions, in tons per year (TPY), shall be submitted for the proposed location if:
 - a) The equipment covered by this Temporary Covered Source Permit will be operated with other stone processing equipment owned or operated by the permittee (i.e., crushers, screens, diesel engines, etc. permitted under other Pineridge Farms, Inc. air permits) at the new location; or
 - b) The equipment covered by this Temporary Covered Source Permit will be located at a site where other stone processing equipment owned or operated by the permittee have operated within the last twelve (12) months.

The submitted emissions shall verify that the total combined maximum potential

emissions from all of the stone processing equipment owned or operated by the permittee at the proposed location do not exceed the threshold limits for a "major source" as defined in HAR §11-60.1-1.

- ii. If operation at the proposed location will include the combined operation of the 275 HP Caterpillar diesel engine with another permitted stone processing plant diesel engine that is owned or operated by the permittee, an ambient air quality impact assessment for the combined operation of the diesel engines at the same location shall be submitted;
- i. Certification that no modification will be made to the equipment, and operational methods will remain similar as permitted under this temporary covered source permit at the new location; and
- j. Any additional information as requested by the Department of Health, including an ambient air quality impact assessment of the facility at the new location.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

2. The applicable filing fee shall be submitted to the Department of Health with each change in location request.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

3. Prior to any relocation, the Department of Health shall approve, conditionally approve, or deny in writing each location change. If the Department of Health denies a location change, the applicant may appeal the decision pursuant to HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

4. At each of the authorized locations, the permittee shall operate in accordance with this Temporary Covered Source Permit and all applicable requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

5. All the information required in this section shall be submitted to the Department of Health using the attached form, "*Change of Location Request for a Temporary Source*," including the area map showing the new proposed location.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

Section H. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

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

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

[Issuance Date]

[Expiration Date]

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

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

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

DRAFT

**COMPLIANCE CERTIFICATION FORM
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
PAGE 1 OF ____**

[Issuance Date]

[Expiration Date]

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

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

For Period: _____ Date: _____

Company/Facility Name: _____

Responsible Official (Print): _____

Title: _____

Responsible Official (Signature): _____

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

**COMPLIANCE CERTIFICATION FORM
 TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
 (CONTINUED, PAGE 2 OF ___)**

[Issuance Date]

[Expiration Date]

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

Instructions:

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

A. Attachment I, Standard Conditions

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

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

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

<p>COMPLIANCE CERTIFICATION FORM TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT (CONTINUED, PAGE ___ OF ___)</p>	
<p>[Issuance Date]</p>	<p>[Expiration Date]</p>

D. Deviations

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

(Make Additional Copies if Needed)

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall provide the following information to the Department of Health:

(Make Copies for Future Use)

1. The permittee shall submit a change of location request for all succeeding location changes. The change of location request shall include the attached Change of Location Request for a Temporary Source Form and the items identified in nos. 2, 3, and 4 below. The change of location request shall be submitted to the Department of Health for approval at least thirty (30) days, or such lesser time as designated and approved by the Department of Health, prior to the change in location.
2. The permittee shall submit a location map of the new temporary location containing the following information:
 - a. Identification of the property boundary, fence lines, and general terrain features (i.e. flat, hilly, steep);
 - b. Location of all structures within 100 meters (330 feet) of the equipment;
 - c. Location of the equipment moving to the new temporary location; and
 - d. Location of other air pollution sources owned and operated by the permittee at the new location, if any.
3. The permittee shall submit a filing fee with each change in location request. The filing fee shall be made payable to the **Clean Air Special Fund-COV** and is as follows:

Covered Sources

_____ \$100.00 for Non-Air Toxic

_____ \$1,000.00 for Air Toxic

4. If requested by the Department of Health, the permittee shall submit any additional information including an ambient air quality impact analysis of the equipment at the new location.
5. This notification form shall be mailed to the following address:

**CLEAN AIR BRANCH
ENVIRONMENTAL MANAGEMENT DIVISION
HAWAII DEPARTMENT OF HEALTH
P.O. Box 3378
Honolulu, HI 96801-3378
(808) 586-4200**

-
1. Prior to any relocation, the Department of Health shall approve, conditionally approve, or deny in writing each location change. If the Department of Health denies a location change, the applicant may appeal the decision pursuant to HRS, Chapter 91.
 2. At each new authorized location, the permittee shall operate in accordance with the current Temporary Covered Source Permit and all applicable requirements.

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(CONTINUED)**

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

- 1. Company Name: _____
- 2. Mailing Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone Number: _____
- 3. Name of Owner/Owner's Agent: _____
 Title: _____ Phone Number: _____
- 4. Equipment Description (identify each equipment to be relocated): _____

5. Current Location of Equipment: _____

6. New Location Information

- a. Street Address: _____
- b. City: _____ Zip Code: _____ Island: _____
- c. For sites with no street address, provide:
 Description of location: _____
 or, Tax map key: _____
- d. Plant manger/contact: _____ Phone: _____
- e. Proposed start date at new location: _____
- f. Estimated project duration at new location: _____
- g. Describe general terrain features (e.g. flat, hilly, steep, etc.): _____
 Approximate Slope (%): _____ Direction of increasing slope: _____
- h. List structures within **100 meters (330 feet)** of the equipment and which have heights greater than 40% of the equipment stack height. In the following table, provide the height, length, width, and distance to the equipment stack at the new site. If there are no applicable structures, specify "none."

Structure	Distance from Stack (ft)	Height (ft)	Length (ft)	Width (ft)

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(CONTINUED)**

[Issuance Date]

[Expiration Date]

i. Brief description of the work to be performed: _____

j. Identify other air pollution sources owned and operated by the permittee at the new location, if any: _____

k. Provide estimated distances to the nearest residence and/or occupied establishments (e.g. schools, businesses, etc.):

Distance	Identify if residence, school, business, etc.

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that no modifications will be made to the equipment and operational methods will remain similar as permitted under the current temporary covered source permit at this new location.

Responsible Official (Print name): _____ Date: _____

Title of Responsible Official: _____

Responsible Official (Signature): _____

**MONITORING REPORT FORM
OPERATING HOURS/FUEL CERTIFICATION
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(PAGE 1 OF 2)**

[Issuance Date]

[Expiration Date]

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

(Make Copies for Additional Use)

For Period: _____ To _____ Date: _____

Company Name: Isemoto Contracting Co. Ltd

Equipment Location: _____

Equipment Description: _____

Model No.: _____

Serial No.: _____

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

Responsible Official (Print): _____

TITLE: _____

Responsible Official (Signature) _____

1. OPERATING HOURS FOR THE REPORTING PERIOD:

Month	Diesel Engines		Notes
	Monthly Operating Hours	Total Operating Hours for 12-Month Rolling Period	
		275 HP DEG	
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
OPERATING HOURS/FUEL CERTIFICATION
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(CONTINUED, PAGE 2 OF 2)**

[Issuance Date]

[Expiration Date]

2. FUEL CERTIFICATION FOR THE REPORTING PERIOD.

*Diesel Engine		
Unit Serial Number	Type of Fuel Fired	Maximum % Sulfur Content

*** SPECIFICATIONS:**

Manufacturer:

Model No.:

Serial No.:

Fuel Usage:

Design Capacity:

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

[Issuance Date]

[Expiration Date]

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

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

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

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

VISIBLE EMISSIONS FORM
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT

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

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

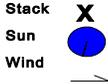
Company Name: _____

For stacks, describe equipment and fuel: _____

For fugitive emissions from crushers and screens, describe:

Fugitive emission point: _____

Plant Production (tons/hr): _____



Draw North Arrow



Site Conditions:

Emission point or stack height above ground (ft): _____

Emission point or stack distance from observer (ft): _____

Emission color (black or white): _____

Sky conditions (% cloud cover): _____

Wind speed (mph): _____

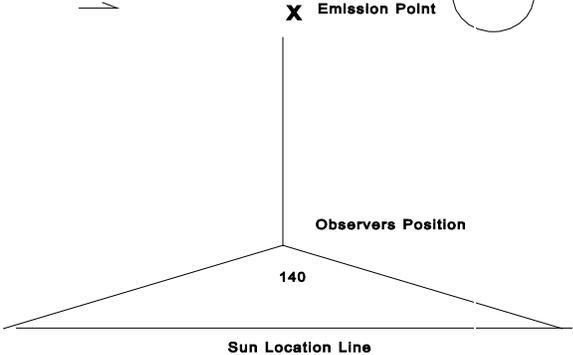
Temperature (° F): _____

Observer Name: _____

Certified? (Yes/No): _____

Observation Date and Start Time: _____

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



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

Observation Date and Start Time: _____

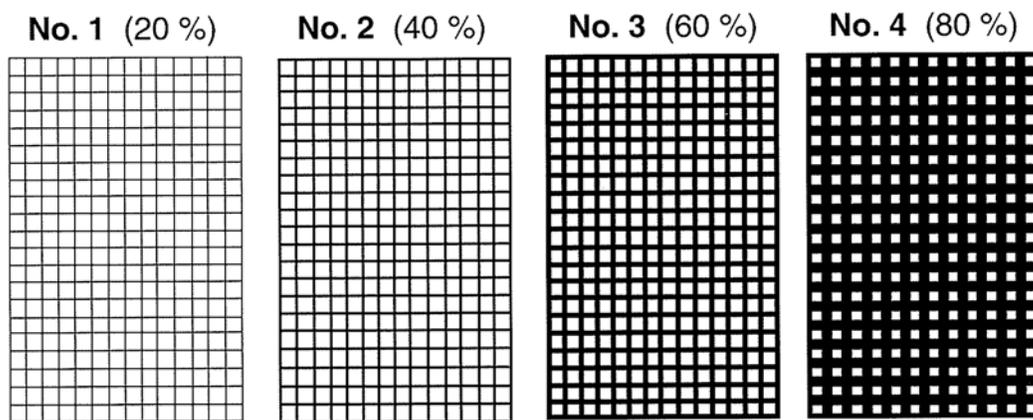
Method of observation (Ringelmann Chart or Method 9): _____

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

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.