

Date

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
(xxxx xxxx xxxx xxxx xxxx)

10-xxxE CAB
File No. 0691

Mr. John Portman
Operations Manager
Road and Highway Builders, LLC
500 Nevada Boulevard
Lovelock, Nevada 89419

Dear Mr. Portman:

Subject: Temporary Covered Source Permit (CSP) No. 0691-02-CT
Initial Covered Source Application No. 0691-03
Road and Highway Builders, LLC
340 TPH Mobile Jaw Crusher with 350 HP Diesel Engine
Located at: Various Temporary Sites, State of Hawaii
Initial Location: Saddle Road (between Mile Posts 12 – 20), Hilo, Hawaii
Date of Expiration: Five Years from Issue Date

The subject temporary 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 April 26, 2010 and the additional information that you submitted as part of your application received on July 30, August 4 and 10, 2010. The permit supersedes in its entirety Noncovered Source Permit No. 0691-01-N issued on September 12, 2008.

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

- Attachment I: Standard Conditions
- Attachment II: Special Conditions
- Attachment 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
- Change of Location Request for a Temporary Source
- Annual Emissions Report Form: Crushing Plant and Diesel Engine
- Monitoring Report Form: Diesel Engine
- Monitoring Report Form: Opacity Exceedances

Mr. John Portman
Date
Page 2

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

Visible Emissions Form Requirements, State of Hawaii
Visible Emissions Form
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,

STEVEN Y.K. CHANG, P.E., ACTING CHIEF
Environmental Management Division

CL:smk

Enclosures

c: Ed Yamamoto, EHS - Hilo
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-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:
- Identification of the specific equipment to be taken out of service, as well as its location and permit number;
 - The expected length of time that the air pollution control equipment will be out of service;
 - The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
 - Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
 - 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:
- Identification of each affected emission point and each emission limit exceeded;
 - Magnitude of each excess emission;
 - Time and duration of each excess emission;
 - Identity of the process or control equipment causing the excess emission;
 - 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
Hawaii Department of Health
919 Ala Moana Boulevard, Room 203
Honolulu, HI 96814**

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

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

¹The 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.

²The 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. 0691-02-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:

340 TPH Extec C-12 Self-Propelled Mobile Jaw Crushing Plant, Serial No. 9966 with a 350 hp Caterpillar C-9 Diesel Engine, Serial No. MBD 01404

(Auth.: HAR §11-60.1-3)

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

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

1. The crushing plant, excluding the diesel engine, 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 of the applicable provisions of these standards, including all emission limits, notification, testing, monitoring, and reporting requirements. The major requirements of these standards are detailed in the special conditions of this permit.

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

Section C. Operational and Emission Limitations

1. Fugitive Emission Limits

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

- b. 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, fugitive emissions which exhibit greater than ten (10) percent opacity.
- c. 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, §11-60.1-161; 40 CFR §60.672)¹

2. Fugitive Emission Control

- a. Measures shall be taken by the permittee to control fugitive dust (e.g., wetting dry material prior to crushing, minimize drop height to stockpile, etc.) for all 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.
- b. A water spray system shall be maintained and utilized, as necessary, during operation of the crushing plant to minimize fugitive dust at the crusher and conveyor transfer point(s).

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

- c. The crushing plant shall not be operated if observation, or the routine inspection required in Attachment II, Special Condition No. D.4.b, indicates a significant drop in water flow rate and/or water pressure, plugged nozzle(s), leak in the piping system, or other problems which affect the efficiency of the water spray system. The permittee shall investigate and correct the problem before resuming operations. The normal operating water pressure (psi) and/or flow rate (gal/min) for the water spray system of the crushing plant shall be established during the performance test conducted pursuant to Attachment II, Section F, and may be incorporated into the permit.
- d. The water spray system(s) shall be maintained in good operating condition at all times with scheduled inspections and maintenance as needed to ensure compliance with the fugitive dust limits.
- e. A water truck shall be maintained and utilized during the facility's operating hours and at other times as necessary to minimize fugitive dust from plant operations (e.g., haul roads, stockpiles, etc.)

3. Diesel Engine

- a. The total operating hours of the diesel engine shall not exceed 2,080 hours in any rolling twelve-month (12-month) period.
- b. The diesel engine shall be fired only on fuel oil no. 2 with a maximum sulfur content not to exceed 0.5% by weight.

- c. For any six (6) minute averaging period, the diesel engine shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, the diesel engine 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) minutes.
- d. The stack height for the diesel engine shall each be at least 13 feet above base elevation.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-38, §11-60.1-90; SIP §60.1-24)²

4. Maintenance

The crushing plant, which includes the crusher, conveyors, water spray system(s), and diesel engine, shall be properly maintained and kept in good operating condition at all times with scheduled inspections and maintenance as recommended by the manufacturer, and as needed.

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

5. 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.
- b. Subsequent location changes of the equipment shall be in accordance with Section G of Attachment II. 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 and HAR §11-60.1-91)

Section D. Monitoring and Recordkeeping

1. Records

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

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

2. Operating Hours

A non-resetting hour meter shall be installed, operated, and maintained on the diesel engine for the permanent recording of the total hours operated. The non-resetting 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.

The meter shall permanently record the total hours of operation for the purpose of the hour limitations specified in Attachment II, Special Condition No. C.3.a. The following information shall be recorded for the diesel engine:

- a. Date of meter readings;
- b. Beginning and ending meter readings for each month;
- c. Total hours of operation for each month; and
- d. Total hours of operation on a rolling twelve-month (12-month) basis.

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

3. Production

The permittee shall maintain records on the total tons of material processed by the crushing plant on a monthly and annual basis for purposes of annual emissions reporting.

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

4. Water Spray System

- a. A water flow meter shall be installed, operated and maintained to measure the pressure and/or flow rate of the water spray system in psi and/or gallons per minute (gal/min).
- b. The water spray system, to include the water pump, piping system, and spray nozzles shall be checked routinely and at least once per month to ensure proper operation of the water spray system.

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

5. Fuel Specification

Fuel purchase receipts, showing the fuel type, sulfur content (percent by weight), date of delivery, and amount (gallons) of fuel delivered for the diesel engine shall be maintained for purposes of the sulfur content limit specified in Attachment II, Special Condition No. C.3.b, and annual emissions reporting. Fuel sulfur content may be demonstrated by providing the supplier's fuel specification sheet for the type of fuel purchased and received.

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

6. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for the equipment covered under this permit. Inspection and replacement of parts and repairs shall be well documented. 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; and
- d. The name and title of the personnel performing inspection/work.

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

7. Performance Test

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

8. Visible Emissions (VE)

- a. Except in those months when VE observations are conducted by a certified reader for the annual observation of the diesel engine, the permittee shall conduct **monthly** (calendar month), VE observations of the diesel engine 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. For the VE observations of the diesel engine, the observer shall comply with the following additional requirements:
 - i. The distance between the observer and the emission source shall be at least three (3) stack heights, but not more than 402 meters (0.25 miles); and
 - ii. The observer shall, when possible, select a position that minimizes interference from other sources of visible emissions. The required observer position relative to the sun (Method 9, 40 CFR Part 60, Appendix A-4, Section 2.1) shall be followed.
- b. Except in those months when performance tests are conducted for fugitive emissions pursuant to Attachment II, Special Conditions, Section F, the permittee shall conduct **monthly** (calendar month), VE observations for the crushing plant 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 for each emissions point subject to opacity limits as specified in Attachment II, Special Condition Nos. C.1.a and C.1.b. For the VE observations of the fugitive emissions, 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), but not greater than 402 meters (0.25 miles);

- ii. The observer shall, when possible, select a position that minimizes interference from other visible emission sources. The required observer position relative to the sun (Method 9, 40 CFR Part 60, Appendix A-4, Section 2.1) shall be followed; and
 - iii. The observer shall record the operating capacity (ton/hr) of the crushing plant at the time the observations were made.
- c. The permittee shall conduct **annually** (calendar year), VE 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.
 - d. Upon written request and justification by the permittee, the Department of Health may waive the requirement for the annual VE observation of the diesel engine. 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.
 - e. Records shall be completed and maintained in accordance with the **Visible Emissions Form** Requirements.

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

Section E. Notification and Reporting Requirements

1. Standard Conditions 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 (in writing) **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of

such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional 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. Notification of Constructed Stack Height

The permittee shall submit to the Department of Health written notification of the final constructed stack height of diesel engine within **fifteen (15) days** following receipt of this covered source permit.

4. Annual Emissions Reports

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

Annual Emissions Report Form: Crushing Plant and Diesel Engine

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

5. Monitoring Reports

The permittee shall submit **semi-annually** the following reports to the Department of Health. The reports shall be submitted **within sixty (60) days** after the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31), and be signed and dated by a responsible official. The following enclosed forms shall be used for reporting:

- a. **Monitoring Report Form: Diesel Engine;** and
b. **Monitoring Report Form: Opacity Exceedances.**

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

6. Performance Testing

- a. At least **thirty (30) days prior** to conducting a source performance test pursuant to Attachment II, Section F, the permittee shall submit a written performance test plan to the Department of Health in accordance with Attachment II, Special Condition No. F.4.

- b. Written reports of the results of the 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 Attachment II, Special Condition No. F.6.

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

7. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA, Region 9, the attached **Compliance Certification Form** pursuant to HAR, §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 be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. 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.

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

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

Section F. Testing Requirements

1. Annual Performance Testing

- a. **Within sixty (60) days after** achieving the maximum production rate at which the crushing plant will be operated, but **not later than one-hundred eighty (180) after permit issuance** the permittee shall conduct or cause to be conducted an initial performance test on the crushing plant equipment subject to the opacity limits specified in Attachment II, Special Condition Nos. C.1.a and C.1.b.

- b. The permittee shall conduct or cause to be conducted an annual performance test on the crushing plant equipment subject to the opacity limits specified in Attachment II, Special Condition Nos. C.1.a and C.1.b.
- c. 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, SIP §11-60.15)^{1,2}

2. Performance Test Methods

- a. The performance tests for the crushing plant shall be conducted by a certified reader using Method 9 of 40 CFR Part 60, Appendix A-4, and the procedures in 40 CFR §60.11 with the following additions for the fugitive emissions observations:
 - 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 (e.g., road dust). The required observer position relative to the sun (Method 9, 40 CFR Part 60, Appendix A-4, Section 2.1) shall be followed; and
 - iii. The observer shall record the operating capacity (tons/hr) of the crushing plant at the time observations were made.
- b. When determining compliance with the fugitive emissions standards of Attachment II, Special Condition Nos. C.1.a and C.1.b, the duration of Method 9 observations must be thirty (30) minutes (five (5) 6-minute averages). Compliance with the applicable fugitive emission limits specified in Attachment II, Special Condition Nos. C.1.a and C.1.b must be based on the average of the five (5) 6-minute averages.
- c. When determining compliance with the fugitive emissions standards of Attachment II, Special Condition Nos. C.1.a and C.1.b, if emissions from two (2) or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
 - i. Use for the combined emission stream, the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream; or
 - ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.
- d. When determining compliance with the fugitive emissions standard of Attachment II, Special Condition Nos. C.1.a and C.1.b, a single visible emission observer may conduct visible emission observations for up to three (3) fugitive emission points within a fifteen-second (15-second) interval if the following conditions are met:
 - i. No more than three (3) emission points may be read concurrently;

- ii. All three (3) emission points must be within a seventy (70) degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three (3) points; and
 - iii. If an opacity reading for any one (1) of the three (3) emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two (2) points and continue reading just that single point.
- e. If, after **thirty (30) days** notice for an initially scheduled performance test, there is a delay, for example, due to operational problems, in conducting any rescheduled performance test required by Section F, the permittee shall submit a notice to the Department of Health at least **seven (7) days prior** to any rescheduled performance test.

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

3. Performance Test Expense and Monitoring

The performance tests shall be made at the expense of the permittee and shall be conducted at the maximum expected operating capacity of the 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. 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 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. Deviations

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. 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 shall include the operating conditions of the facility at the time of the test (e.g., operating rate in tons/hr,

water meter flow rate in gal/min, etc.), locations 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

(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. Performance Test Waiver

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 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 boundary, any fence lines; and general terrain features (i.e., flat, hilly, steep);
 - ii. Location of all structures within 100 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 diesel engine; and
 - iii. Identification of any other air pollution sources at the new location.
 - e. Area map showing the proposed new location of the equipment;
 - f. Projected dates of operation at the new location;
 - g. Identification of any other air pollution sources at the new location;
 - h. 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

- i. 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 and made payable to the **Clean Air Special Fund-COV**.

(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

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)

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. 0691-02-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
919 Ala Moana Boulevard, Room 203
Honolulu, HI 96814**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT**

Issuance Date:

Expiration Date:

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

1. Complete the attached form(s):

Annual Emissions Report Form: Crushing Plant and Diesel Engine

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 manufacture, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

**COMPLIANCE CERTIFICATION FORM
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-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. 0691-02-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> All standard conditions	<u>Equipment(s)</u> All Equipment(s) listed in the permit	<u>Compliance</u> Continuous Intermittent
---	--	---

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

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

PROPOSED

**COMPLIANCE CERTIFICATION FORM
 TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT
 (CONTINUED, PAGE ____ OF ____)**

Issuance Date:

Expiration Date:

C. Special Conditions - Operational and Emissions Limitations

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

<u>Permit term/condition</u>	<u>Equipment(s)</u>	<u>Method</u>	<u>Compliance</u>
		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
 TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT
 (CONTINUED, PAGE ___ OF ___)**

Issuance Date:

Expiration Date:

D. Deviations

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

(Make Additional Copies if Needed)

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-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

_____ \$300.00 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
919 ALA MOANA BOULEVARD, ROOM 203
Honolulu, HI 96814
(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. 0691-02-CT
(PAGE 1 OF 2)**

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 manager/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. 0691-02-CT
(PAGE 2 OF 2)**

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): _____

**ANNUAL EMISSIONS REPORT FORM
CRUSHING PLANT AND DIESEL ENGINE
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT
(Page 1 of 2)**

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

(Make Copies for Future Use)

For Period: _____ Date: _____

Company name: _____

Facility name: _____

Equipment location: _____

Equipment description: _____

Serial/ID Number: _____

Serial/ID Number: _____

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): _____

For the reporting period: _____

1. Report the quantity of material processed:

Type of Operation	Materials Processed (tons/yr)	Air Pollution Control Measures	Control Efficiency (% Reduction)
Truck Unloading			
Crushing			
Conveyors			
Stockpiles			
Truck Loading			

Note: Control measures include water sprays, housing and duct work to baghouses.

Use the following Control Efficiencies, unless documentation is available to show otherwise:

Baghouses: 99%

Water sprays, or Shroud: 70%

*Subsequent transfer points of water sprayed material: 70-(5*n)%*

Efficiency factors may be reduced by the Department of Health, if there are any indications that a source's air pollution control device is not operating at the specified efficiency.

Indicate in the table above, next to the type of operation, if the specified operation did not occur during the reporting period.

**ANNUAL EMISSIONS REPORT FORM
CRUSHING PLANT AND DIESEL ENGINE
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT
(Page 2 of 2)**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

2. Report the diesel engine fuel consumption as follows:

Model	Capacity	Maximum % Sulfur Content by Weight	Total Fuel Oil No. 2 Consumption (gal/yr)

**MONITORING REPORT FORM
DIESEL ENGINE
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT
(Page 1 of 2)**

Issuance Date: _____

Expiration Date: _____

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

(Make Copies for Future Use)

For Period: _____ Date: _____

Company name: _____

Facility name: _____

Equipment location: _____

Equipment description: _____

Serial/ID Number: _____

Serial/ID Number: _____

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): _____

For the reporting period:

1. Report the total operating hours of the 350 hp diesel engine for the reporting period:

Month	Total Operating Hours Monthly Basis	Total Operating Hours 12-Month Rolling Basis	Notes
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**MONITORING REPORT FORM
DIESEL ENGINE
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT
(Page 2 of 2)**

Issuance Date:

Expiration Date:

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions:

2. Report the maximum fuel sulfur content (% by weight) of fuel oil no. 2 for the reporting period:

Equipment Description	Types of Fuel Fired	Maximum Sulfur Content (% by Weight)
350 hp Diesel Engine	Fuel Oil No. 2	

If not already on file at the Department of Health, provide the supplier's fuel specification sheet for the type of fuel indicated in the above table. The fuel specification sheet shall indicate the percent sulfur content by weight.

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT**

Issuance Date:

Expiration Date:

The **Visible Emissions (VE) 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*), VE observation shall be conducted for each 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. For VE observations of stacks, stand at least three (3) stack heights but not more than a quarter mile from the stack.
4. For VE observations of fugitive emissions from crushing plant, 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 VE Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health, or their representative upon request.

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	
TEMPORARY COVERED SOURCE PERMIT NO. 0691-02-CT	
Issuance Date: _____	Expiration Date: _____

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

Company Name: _____

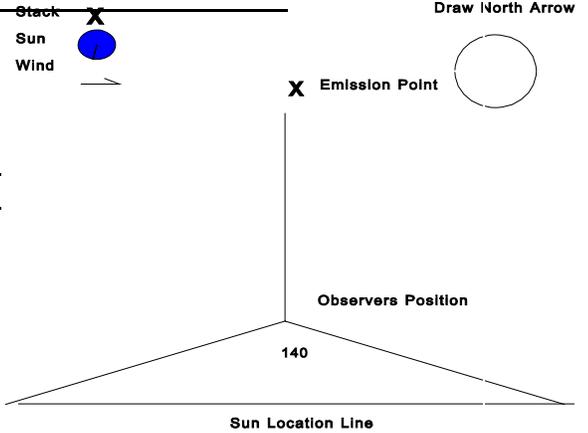
For stacks, describe equipment and fuel: _____

For fugitive emissions from crushers and screens, describe:

Fugitive emission point: _____

Plant Production (tons/hr): _____

(During observation)



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: _____

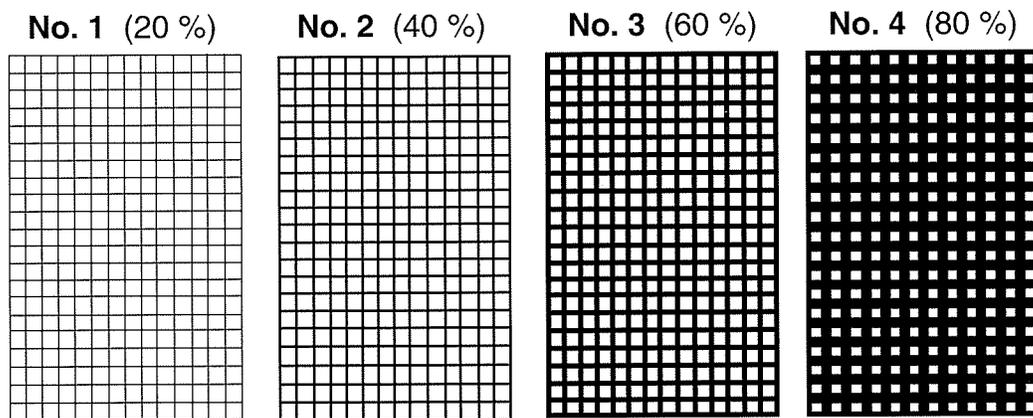
Method of observation (Ringelmann Chart or Method 9): _____

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.