

ADMINISTRATIVE RECORD

Isemoto Contracting Co., Ltd.
350 TPH Mobile Crushing Plant

Application No. 0702-02 for Renewal

Located At: Various Temporary Sites, State of Hawaii

Temporary CSP No. 0702-01-CT

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Public Notice

**REQUEST FOR PUBLIC COMMENTS
ON DRAFT AIR PERMIT
REGULATING THE EMISSIONS OF AIR POLLUTANTS**

(Docket No. 24-CA-PA-02)

Pursuant to Hawaii Revised Statutes (HRS), Chapter 342B-13 and Hawaii Administrative Rules (HAR), Chapter 11-60.1, the Department of Health, State of Hawaii (DOH), is requesting public comments on the following **DRAFT PERMIT** presently under review for:

Temporary Covered Source Permit (CSP) No. 0702-01-CT

Application No. 0702-02 for Renewal

Isemoto Contracting Co., Ltd.

350 TPH Mobile Crushing Plant

Located At: Various Temporary Sites, State of Hawaii

Current Location: North Kona, Island of Hawaii

UTM: Zone 4; 813,882 m E, 2,177,921 m N (NAD-83)

The **DRAFT PERMIT** is described as follows:

The issuance of Temporary CSP No. 0702-01-CT will grant conditional approval for the continued operation of a 350 tons per hour (TPH) Terex Pegson self-propelled crushing plant. Water suppression will be used as necessary to minimize fugitive emissions. The crusher is subject to 40 Code of Federal Regulations (CFR), Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. This permit, if issued, will supersede Temporary CSP No. 0702-01-CT, issued on July 14, 2019, in its entirety.

The **ADMINISTRATIVE RECORD**, consisting of the **APPLICATION** and non-confidential supporting material from the applicant, the permit review summary, and the **DRAFT PERMIT**, is available for public inspection online at:

<http://health.hawaii.gov/cab/public-notice/> and at the following locations during regular office hours, Monday through Friday, 7:45 a.m. to 4:15 p.m.:

Oahu:

State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, Hawaii 96782

Hawaii:

Hilo: Hawaii District Health Office, Department of Health
1582 Kamehameha Ave., Hilo, Hawaii 96720

Kona: Sanitation Branch, Department of Health
79-1020 Haukapila Street, Room 115, Kealahou, Hawaii 96750

All comments on the draft permit and any request for a public hearing must be in writing, addressed to the Clean Air Branch at the above address on Oahu and must be postmarked or received by **March 13, 2024**.

Any person may request a public hearing by submitting a written request that explains the party's interest and the reasons why a hearing is warranted. The DOH may hold a public hearing if a hearing would aid in DOH's decision. If a public hearing is warranted, a public notice for the hearing will be published at least thirty (30) days in advance of the hearing.

Interested persons may obtain copies of the administrative record or parts thereof at a copying cost of five (5) cents per page. Please send written requests to the Clean Air Branch listed above or call the Permitting Section of the Clean Air Branch at (808) 586-4200.

Comments on the draft permit should address, but need not be limited to, the permit conditions and the facility's compliance with federal and state air pollution laws, including: (1) the National and State Ambient Air Quality Standards; and (2) HRS, Chapter 342B and HAR, Chapter 11-60.1.

The DOH will make a final decision on the permit after considering all comments and will send notice of the final decision to each person who has submitted comments or requested such notice.

Kenneth S. Fink, MD, MGA, MPH
Director of Health

Draft Permit

DATE

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

24-XXXE CAB
File No. 0702

Mr. Scot Yoshimura
Vice President, West Hawaii Operations
Isemoto Contracting Co., Ltd.
74-5039B Queen Kaahumanu Highway
Kailua-Kona, Hawaii 96730

Dear Mr. Yoshimura:

**SUBJECT: Temporary Covered Source Permit (CSP) No. 0702-01-CT
Application No. 0702-02 for Renewal
Isemoto Contracting Co., Ltd.
350 TPH Mobile Crushing Plant
Located At: Various Temporary Sites, State of Hawaii
Current Location: North Kona, Island of Hawaii
UTM: Zone 4; 813,882 m E; 2,177,921 m N (NAD-83)
Date of Expiration: DATE**

The subject temporary CSP 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 12, 2013. This permit supersedes Temporary CSP No. 0702-01-CT issued on July 14, 2009, in its entirety.

The temporary CSP 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
Annual Emissions Report Form: Mobile Crushing Plant
Change of Location Request for a Temporary Source
Monitoring Report Form: Opacity Exceedances

Mr. Scot Yoshimura
DATE
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The following forms are enclosed for your use in monitoring visible emissions:

Visible Emissions Form Requirements: State of Hawaii
Visible Emissions Form

This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment; and (c) in no manner implies or suggests that the Department of Health, Clean Air Branch (herein after referred to as Department) 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.

If you have any questions, please contact the Permitting Section of the Clean Air Branch at (808) 586-4200.

Sincerely,

JOANNA L. SETO, P.E., CHIEF
Environmental Management Division

AT/CL:tkg

Enclosures

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

Issuance Date: DATE

Expiration Date: DATE

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

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

(Auth.: HAR §11-60.1-90)

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

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

3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department, 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.

(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 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 temporary CSP. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department, 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)

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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 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)

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15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department 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 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 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 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. **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 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;
 - 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;

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- 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 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.

(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)

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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 a covered source covered by this permit**, the discontinuance shall be reported in writing to the Department 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 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 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)

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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:

State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, Hawaii 96782

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

Manager
Enforcement Division, Air Section
U.S. Environment Protection Agency, Region 9
75 Hawthorne Street, ENF-2-1
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. 0702-01-CT**

Issuance Date: DATE

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In addition to the standard conditions of the temporary CSP, the following emissions units are subject to the special conditions listed below.

Section A. Equipment Description

1. This permit encompasses the following equipment and associated appurtenances:
 - a. 350 TPH Mobile Crushing Plant, Model Terex Pegson Premiertrak XA400, Serial No. 400048DFXA with built-in water spray system;
 - b. Belt Conveyor; and
 - c. Water Spray Systems.
2. An identification tag or name plate shall be displayed on the equipment listed above to show model number, serial number, and manufacturer, as applicable. 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 350 TPH Mobile Crushing Plant is subject to the following federal regulations.
 - a. 40 Code of Federal Regulations (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 Processing Plants.
2. The permittee shall comply with all applicable requirements of these standards, including all emission and operating limits, monitoring, recordkeeping, notification, reporting, and testing requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-61.1-90, §11-60.1-161; 40 CFR Part 60, Subpart OOO)

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

Section C. Emission and Operational Limitations

1. Fugitive Emissions Control
 - a. 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 (VE) of fugitive dust beyond the lot line of the property boundary on which the emissions originate.

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- b. The permittee shall take measures to control and minimize fugitive dust (e.g., wet suppression, enclosures, dust screens, etc.) at all material transfer points, stockpiles, plant roads, loading and unloading operations, and throughout the work yard. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- c. Water spray systems shall be maintained and utilized, as necessary, during operation of the crushing plant to ensure compliance with the fugitive emission limits. The Department 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.
- d. The crushing plant shall not be operated if observation, or the routine inspection required in Attachment II, Special Condition No. D.3.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 systems. 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 systems shall be established during the performance test conducted pursuant to Attachment II, Special Conditions, Section F, and may be incorporated into the permit.
- e. Water sprays/hoses shall be maintained and utilized as necessary, to minimize fugitive dust from plant operations (e.g., haul roads, storage piles, material transfer, etc.). The Department at any time may require additional water sprays or manual spraying at pertinent locations if an inspection indicates that more fugitive dust control is needed.
- f. 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.).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-33, §11-60.1-90)

2. Maintenance

The 350 TPH Mobile Crushing Plant and water spray systems 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)

3. Mobile Crushing Plant Operation

- a. The permittee shall not cause to be discharged into the atmosphere from any 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 conveyers, fugitive emissions which exhibit greater than ten (10) percent opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-90; 40 CFR Part 60, Subpart 000)

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4. Change of Location

- a. The operation of the equipment covered by this temporary CSP shall involve at least one (1) location change during the term of this permit. Moving within a single property is not considered a location change.
- b. Location changes of the equipment shall be in accordance with Special Conditions, Attachment II, Section G. For each change in location, the Department reserves the right to impose additional operational controls and restrictions if a site evaluation indicates the controls and/or restrictions are necessary.

(Auth.: HAR §11-60.1-3, §11-60.1-82, §11-60.1-90, §11-60.1-92)

Section D. Monitoring and Recordkeeping Requirements

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 or its representative(s) upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. Production

The permittee shall maintain records on the total tons of material processes by the crushing plant for the purposes of annual emissions reporting.

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

3. Water Spray Systems

- a. A water pressure gauge and/or flow meter shall be installed, operated, and maintained to measure the pressure and/or flow rate of the water spray systems in psi and/or gallons per minute (gal/min).
- b. The water spray systems, to include the water pump, piping system, spray nozzles, and any gauges (i.e., water pressure, water flow meter, etc.) shall be inspected routinely at least once per month to ensure proper operation of the water spray system.
Inspections of the water spray system shall be recorded in the Inspection, Maintenance, and Repair Log of Attachment II, Special Condition No. D.4.

(Auth.: HAR §11-60.1-3, §11-60.1-90 §11-60.1-161; 40 CFR §60.674)

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4. Inspection, Maintenance, and Repair Log

- a. 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:
 - 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. Performance Testing

Performance tests shall be conducted on the plant pursuant to Attachment II, Section F. Test plans, 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)

6. Visible Emissions

- a. Except in those months when performance tests are conducted for fugitive emissions pursuant to Attachment II, Section F, the permittee shall conduct **monthly** (calendar month), VE observations for the crushing plant by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9, or U.S. EPA approved equivalent methods, or alternative methods with prior written approval from the Department and the U.S. EPA. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each emission point subject to an opacity limit. Records shall be completed and maintained in accordance with the VE form requirements. For the VE, 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 (fifteen (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 VE sources. The required observer position relative to the sun (Method 9 of Appendix A-4, Section 2.1) shall be followed; and
 - iii. The observer shall record the operating capacity (ton/hr) on the plant at the time the observations were made.

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- b. The Department may allow observation of a portion of the total fugitive emission points subject to opacity limits, if it can be demonstrated that operations have been in compliance with the permit. At a minimum, at least three (3) fugitive emission points shall be observed each month. The selected points shall include the primary crusher, screen, and a transfer point as applicable, or those points as specified by the Department. Allowance to observe a portion of the total required fugitive emission points shall be obtained in writing from the Department.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; 40 CFR Part 60, Subpart OOO)

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. 14, 16, 17, and 24, 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; 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)

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 preventative measures taken. Corrective actions may include a requirement for additional testing, or more frequent monitoring, or could trigger implementation of a corrective action plan.

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

3. Annual Emissions Reports

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

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Annual Emissions Report Form: Mobile Crushing Plant

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

4. Monitoring Reports

The permittee shall submit **semi-annually** the following reports to the Department. 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:

Monitoring Report Form: Opacity Exceedances

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

5. Performance Testing

- a. At least **thirty (30) days** prior to conducting a source performance test pursuant to Attachment II, Special Condition, Section F, the permittee shall submit a performance test plan to the Department in accordance with Attachment II, Special Condition No. F.4.
- b. Within **sixty (60) days** after completion of a source performance test, the permittee shall submit a test report in accordance with Attachment II, Special Condition No. F.6.

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

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department 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 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)(13) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act.

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- f. Brief description of any deviations including identifying as possible exceptions to compliance any periods during which compliance is required and in which the excursion or exceedances as defined in 40 CFR Part 64 occurred; and
- g. Any additional information as required by the Department including information to determine compliance.

The compliance certification shall be submitted within **sixty (60) days** after the end of each calendar year and shall be signed and dated by a responsible official.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department 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. The permittee shall conduct or cause to be conducted **annual** performance tests on the crushing plant to determine the opacity of emissions. Tests shall be conducted for each point subject to an opacity limit specified in Attachment II, Special Condition No. C.3.
- b. The performance tests shall be conducted at the maximum expected operating capacity of the crushing plant.
- c. The Department 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 §60.8, §60.675)

2. Performance Test Methods

- a. Performance tests for the determination of opacity 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 emission observations:
 - i. The minimum distance between the observer and the emission source shall be 4.57 meters (fifteen (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 of Appendix A-4 of this part, Section 2.1) shall be followed; and
 - iii. The observer shall record the operating capacity(tons/hr) of the crushing plant at the time the observations were made.
 - iv. The observer shall record the flow rate for the water spray system in gallons per minute servicing the plant.

- b. When determining compliance with fugitive emissions standards of Attachment II, Special Conditions No. C.1., the duration of Method 9 observations must be thirty (30) minutes (five (5) six (6) minute averages). Compliance with the applicable fugitive emission limits specified in Attachment II, Special Condition No C.1, must be based on the average of the five (5) six (6) minute averages.
- c. When determining compliance with fugitive emissions standard of Attachment II, Special Condition No. C.3, 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 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 the emissions from each affected facility can be read.
- d. When determining compliance with the fugitive emissions standard of Attachment II, Special Conditions No. C.3, a single VE observer may conduct VE observations for up to three (3) fugitive, stack, or vent emission points within a fifteen (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 (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 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; 40 CFR §60.675)¹

3. Performance Test Expense and Monitoring

The performance tests shall be made at the expense of the permittee. All performance tests may be monitored by the Department

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

4. Performance Test Plan

At least thirty days prior to conducting a performance test, the permittee shall submit a written performance test plan to the Department and U.S. EPA, Region 9, that includes date(s) of the test, test duration, test locations, test methods, source operations, locations of VE 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 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, §60.675; SIP §11-60-15)

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 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 a source performance test, the permittee shall submit to the Department and the U.S. EPA, Region 9, the test report which shall include the operating conditions of the equipment at the time of the test (e.g., operating rate in tons/hr, water meter flow rate in gal/min, etc.), locations where the VE were read, VE readings, location of water sprays, summarized test results, comparative results with 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; 40 CFR §60.8, §60.675; SIP §11-60-15)

7. Performance Test Waiver

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

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Section G. Change of Location Requirements

1. For all location changes, the permittee shall submit the enclosed **Change of Location Request for a Temporary Source** form to the Department for approval **at least thirty (30) days prior to the change in location**, or such lesser time as designated and approved by the Department.
2. With each change of location request, the permittee shall submit to the Department:
 - a. A map of the proposed new temporary location showing the property boundary, fence lines, location of the equipment on the property, and the location of any other air pollution sources owned and operated by the permittee at the new location; and
 - b. An area map showing the proposed new temporary location.
3. The applicable filing fee shall be submitted to the Department with each change in location request and made payable to the **Clean Air Special Fund-COV**.
4. The permittee shall submit any additional information as requested by the Department.
5. Prior to any relocation, the Department shall approve, conditionally approve, or deny in writing each location change. If the Department denies a location change, the applicant may appeal the decision pursuant to HRS, Chapter 91.
6. The change of location approval, or a copy thereof, shall be maintained near the source and shall be made available for inspection upon request by the Department.
7. At each of the authorized locations, the permittee shall operate in accordance with this temporary CSP and all applicable requirements.

Section H. Agency Notification

Any document (including reports) required to be submitted by this temporary CSP shall be done in accordance with Attachment I, Standard Condition No. 2

(Auth.: HAR §11-60.1-4, §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 III: ANNUAL FEE REQUIREMENTS
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

Issuance Date: DATE

Expiration Date: DATE

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

1. Annual fees shall be paid in full:
 - a. Within **120 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 HAR, 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.
4. The annual fees and the emission data shall be mailed to:

**State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, Hawaii 96782**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

Issuance Date: DATE

Expiration Date: DATE

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

1. Complete the attached form(s):

Annual Emissions Report Form: Crushing Plant

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

**State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, Hawaii 96782**

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 upon request.
4. Any information submitted to the Department 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. 0702-01-CT
PAGE 1 OF ____

Issuance Date: DATE

Expiration Date: DATE

In accordance with the Hawaii Administrative Rules (HAR), 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 HAR, 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: DATE

Expiration Date: 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</u> | <u>Compliance</u> |
|------------------------------|------------------------------------|--|
| All standard conditions | All Equipment listed in the permit | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |

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

| | | |
|--|--|---|
| <u>Permit term/condition</u> All monitoring conditions | <u>Equipment</u> All Equipment listed in the permit | <u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| <u>Permit term/condition</u> All recordkeeping conditions | <u>Equipment</u> All Equipment listed in the permit | <u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| <u>Permit term/condition</u> All reporting conditions | <u>Equipment</u> All Equipment listed in the permit | <u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| <u>Permit term/condition</u> All testing conditions | <u>Equipment</u> All Equipment listed in the permit | <u>Compliance</u> <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |

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

Issuance Date: DATE

Expiration Date: 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 piece of equipment shall be identified using the description stated in Section A of the Special Conditions (e.g., unit no., model no., serial no., etc.). Check all methods (as required by permit) used to determine the compliance status of the respective permit term/condition.

| <u>Permit term/condition</u> | <u>Equipment</u> | <u>Method</u> | <u>Compliance</u> |
|------------------------------|------------------|---|--|
| | | <input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| | | <input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| | | <input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| | | <input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| | | <input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |
| | | <input type="checkbox"/> monitoring <input type="checkbox"/> recordkeeping <input type="checkbox"/> reporting <input type="checkbox"/> testing <input type="checkbox"/> none of the above | <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent |

(Make Additional Copies if Needed)

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

Issuance Date: DATE

Expiration Date: DATE

D. Deviations

| <u>Permit Term/ Condition</u> | <u>Equipment / 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: | |
| | | Beginning: Ending: | |
| | | Beginning: Ending: | |
| | | Beginning: Ending: | |
| | | Beginning: Ending: | |
| | | Beginning: Ending: | |
| | | Beginning: Ending: | |
| | | Beginning: Ending: | |

*Identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred.

(Make Additional Copies if Needed)

**ANNUAL EMISSIONS REPORT FORM
MOBILE CRUSHING PLANT
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT**

Issuance Date: DATE

Expiration Date: 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: _____

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: _____ Phone Number: _____

Responsible Official (Signature): _____

1. Air pollution control measures and efficiencies

| Type of Operation | Air Pollution Control Measures in Use | Control Efficiency (% Reduction) |
|-------------------|---------------------------------------|----------------------------------|
| Rock Crushing | | |
| Conveyer Transfer | | |
| Storage Piles | | |
| Truck Unloading | | |
| Truck Loading | | |
| Unpaved Roads | | |

*If no documentation to prove otherwise use the following Control Efficiencies

- Baghouses: 99%
- Water Sprays: 70%

2. Report the total tons of material processed by the crushing plant for the calendar year:

| Equipment | Material Processed (TPY) |
|--|--------------------------|
| 350 TPH Terex Pegson Mobile Crushing Plant | |
| | |

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(PAGE 1 OF 3)**

Issuance Date: DATE

Expiration Date: DATE

In accordance with the Hawaii Administrative Rules (HAR), 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. For all location changes, the permittee shall complete and submit this change of location request form to the Department of Health for approval **at least thirty (30) days prior to the change in location**, or such lesser time as designated and approved by the Department of Health.
2. With each change of location request, the permittee shall submit to the Department of Health:
 - a. A map of the proposed new temporary location showing the property boundary, fence lines, location of the equipment on the property, and the location of any other air pollution sources owned and operated by the permittee at the new location; and
 - b. An area map showing the proposed new temporary location.
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. The permittee shall submit any additional information as requested by the Department of Health.
5. This **Change of Location Request for a Temporary Source** form shall be mailed to the following address:

**State of Hawaii
Clean Air Branch
2827 Waimano Home Road, #130
Pearl City, HI 96782**

-
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 Hawaii Revised Statutes (HRS), Chapter 91.
 2. The change of location approval, or a copy thereof, shall be maintained near the source and shall be made available for inspection upon request by the Department of Health.
 3. At each new authorized location, the permittee shall operate in accordance with the current temporary covered source permit (CSP) and all applicable requirements.

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(CONTINUED, PAGE 2 OF 3)**

Issuance Date: DATE

Expiration Date: 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 piece of 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: _____
Or UTM Coordinates: _____
Horizontal Datum: _____
 - d. Plant Manager/Contact: _____ Phone Number: _____
 - e. Proposed start date at new location: _____
 - f. Estimated project duration at new location: _____
 - g. Identify any other air pollution sources owned and operated by the permittee at the new location: _____

 - h. Brief description of the work to be performed: _____

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0702-01-CT
(CONTINUED, PAGE 3 OF 3)**

Issuance Date: DATE

Expiration Date: DATE

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

| Distance ¹ | Identify if residence, school, business, etc. |
|-----------------------|---|
| | |
| | |
| | |
| | |

¹Include units, e.g. feet, miles

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 CSP at this new location.

Responsible Official (Print): _____ Date: _____

Title: _____

Responsible Official (Signature): _____

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

Issuance Date: DATE

Expiration Date: DATE

The **Visible Emissions (VE) Form** shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9, or U.S. EPA approved equivalent methods, or alternative methods with prior written approval from the Department and U.S. EPA. The VE Form shall be completed as follows:

1. VE observations shall take place during the day only. 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 and screening plants, stand at least 4.57 meters (15 feet) from the VE source, but not more than a quarter mile from the VE 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, 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. 0702-01-CT

Issuance Date: DATE **Expiration Date: DATE**

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

Company Name: _____

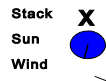
For stacks, describe equipment and fuel: _____

For fugitive emissions from crushers and screens, describe:

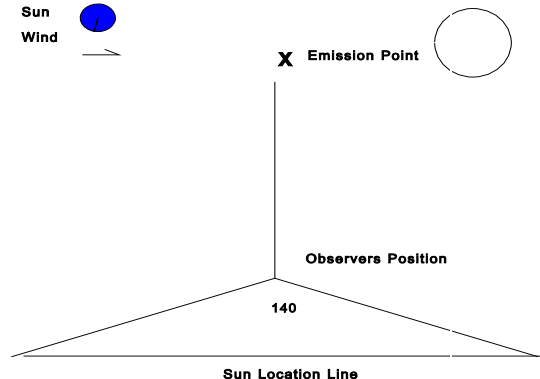
Fugitive emission point: _____

Plant Production (tons/hr): _____

(During observation)



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 (EF): _____

Observer Name: _____

Certified? (Yes/No): _____

Observation Date and Start Time: _____

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

Observation Date and Start Time: _____

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

Draft Review Summary

PERMIT APPLICATION REVIEW
TEMPORARY COVERED SOURCE PERMIT (CSP) NO. 0702-01-CT
Application No. 0702-02 for Renewal

Company: Isemoto Contracting Co., Ltd.

Facility: 350 TPH Mobile Crushing Plant

Mailing Address: 74-5039B Queen Kaahumanu Highway
Kailua-Kona, Hawaii 96740

Current Location: 1. UTM Zone 4 – 813,882 m E; 2,177,921 m N (NAD-83)
North Kona, Island of Hawaii
2. Various Temporary Sites, State of Hawaii

SIC Code: 1411 (Dimension Stone)

Responsible Official: Scot Yoshimura
Vice President, West Hawaii Operations
(808) 329-8051

EQUIPMENT

350 TPH Mobile Crushing Plant, Model Terex Pegson Premiertrak XA400,
Serial No. 4000048DFXA.

The crushing plant was manufactured in 2006.

Isemoto Contracting Co., Ltd., submitted a letter dated May 20, 2009 (received May 22, 2009), notifying the Clean Air Branch that the crushing plant had a different model number and serial number than what was listed in the permit. The permit was subsequently amended on July 14, 2009, to revise the model and serial numbers.

An inspection performed after the permit was issued shows the model and serial number provided by the permittee and included in the July 14, 2009, administrative amendment were incorrect. Note that the model number provided in the initial application was **correct** and the serial number provided in the initial application was **incorrect** (incorrect Serial No. 40048DXFR, correct Serial No. 400048DXFA). The model number, serial number, and year of manufacturer can be confirmed by the identification tag on the crushing plant.

(The 275 HP diesel engine powering the mobile crushing plant is exempt from permitting. See section on Exemptions)

AIR POLLUTION CONTROL

The crushing plant has a built-in water spray system. Water spray systems will be used as needed for the suppression of fugitive dust emissions from crushing, conveyers, storage piles, and unpaved roads. Assumed seventy (70) percent control efficiency for water sprays. (Pursuant to Hawaii Administrative Rules (HAR) §11-60.1-33).

BACKGROUND

Isemoto Contracting Co., Ltd., (Applicant) has submitted a temporary CSP renewal application to continue operations of a 350 TPH Terex Pegson Premiertrak XA400 Mobile Crushing Plant powered by an exempt 275 HP Deutz Caterpillar C-9 diesel engine. Basalt rock is dropped into a grizzly feeder, which then diverts undersized material onto the side of the side of the plant. The rest of the material travels through the crusher, onto a conveyer belt, and then finally feeds into a stockpile.

The permit issued July 14, 2009, included a 2,080-hour operating limit during any rolling twelve (12) month period. **This limit is not included** in this permit because the Clean Air Branch determined the limit was not necessary for the following reasons.

The diesel engine once permitted in prior permits is now exempt due to its nature as a nonroad engine that propels a mobile source. **HAR §11-60.1-82(d)(4)**

Prior to the 2014 revisions of the HAR, Chapter 11-60.1, both capturable and non-capturable fugitive emissions were included in the evaluation of whether a facility was a major source of emissions. In 2014, the HAR, Chapter 11-60.1 was revised to be consistent with federal regulations which excludes non-capturable emissions from major source determinations if the source is not a listed source that must include fugitive emissions in major source determinations.

EXEMPTIONS

The 275 HP Caterpillar C-9 diesel engine is a nonroad engine by definition of **40 CFR §1068.30 “Nonroad engine”**. Pursuant to HAR §11-60.1-82(d)(4) the diesel engine is **exempt** from HAR §11-60.1-82(a), “Internal combustion engines propelling mobile sources”.

INSIGNIFICANT ACTIVITY

None proposed.

APPLICABLE AND NON-APPLICABLE REQUIREMENTS

Hawaii Administrative Rules (HAR)

Title 11, Chapter 59, Ambient Air Quality Standards

Title 11, Chapter 60.1, Air Pollution Control

Subchapter 1, General Requirements

Subchapter 2, General Prohibitions

11-60.1-31, Applicability

11-60.1-33, Fugitive Dust

Subchapter 5, Covered Sources

Subchapter 6, Fees for Covered Sources, Noncovered Sources, and Agricultural Burning

11-60.1-111, Definitions

11-60.1-112, General Fee Provisions for Covered Sources

11-60.1-113, Application Fees for Covered Sources

11-60.1-114, Annual Fees for Covered Sources

11-60.1-115, Basis of Annual Fees for Covered Sources

Subchapter 8, Standards of Performance for Stationary Sources
 11-60.1-161, New Source Performance Standards
 Subchapter 10, Field Citations

Clean Air Branch In-House Annual Emissions Reporting

The Clean Air Branch requires annual emissions reporting from those facilities that have facility wide emissions exceeding the DOH reporting levels and for all covered sources. This facility is a covered source and **will be required** to report emissions to the Clean Air Branch.

Air Emissions Reporting Requirements (AERR)

Code of Federal Regulations Title 40 Part 51, Part A

The Clean Air Branch includes only point source and potentially capturable emissions when the source is a non-listed source in determining if AERR is applicable. Emissions from the mobile crushing plant itself (considered potentially capturable), do not exceed AERR triggering levels of Type A or Type B sources and are **not subject** to the requirements of AERR.

| Pollutant | Annual Cycle (Type A Sources) | Three-year Cycle (Type B Sources) |
|-------------------|----------------------------------|--------------------------------------|
| SO _x | ≥2,500 | ≥100 |
| VOC | ≥250 | ≥100 |
| NO _x | ≥2,500 | ≥100 |
| CO | ≥2,500 | ≥1,000 |
| Pb | - | ≥0.5 (actual) |
| PM ₁₀ | ≥250 | ≥100 |
| PM _{2.5} | ≥250 | ≥100 |
| NH ₃ | ≥250 | ≥100 |

Prevention of Significant Deterioration (PSD)

Code of Federal Regulations Title 40 Part 52

PSD **does not apply**. The facility is not a listed source in the definition of “major stationary source” of 40 CFR §52.21 and HAR §11-60.1-131 and potential emissions from the facility are less than 250 tons per year, which is the trigger level for a non-listed source.

New Source Performance Standards (NSPS)

Code of Federal Regulations Title 40 Part 60

Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants **is applicable** to the crushing plant because the maximum capacity of the facility is greater than 150 tons/hour, and the crushing plant was manufactured after August 31st, 1983. The crushing plant was manufactured in 2006.

Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines **is not applicable** as this subpart only regulates stationary internal combustion engines, which doesn't include the nonroad engine of this source. The nonroad engine of this source is self-propelled or serves a dual purpose by both propelling itself and performing another function and is **not subject to residence time requirements** of nonroad engine determination.

National Emission Standards for Hazardous Air Pollutants (NESHAPS)
Code of Federal Regulations Title 40 Part 61

There are **no applicable NESHAPS standards** that apply to this facility or equipment under 40 CFR Part 61.

Compliance Assurance Monitoring (CAM)
Code of Federal Regulations Title 40 Part 64

This source **is not subject** to CAM because the facility is not a major source. The purpose of CAM is to provide a reasonable assurance that compliance is being achieved with large emissions units that rely on air pollution control device equipment to meet an emissions limit or standard. Pursuant to 40 CFR Part 64, §64.2(a), for CAM to be applicable, the emissions unit must:

- (1) Be located at a major source;
- (2) Be subject to an emissions limit or standard;
- (3) Use a control device to achieve compliance;
- (4) Have potential pre-control emissions that are equal to or greater than 100% of the major source level; and
- (5) Not otherwise be exempt from CAM.

Covered Source Best Available Control Technology (BACT) HAR §11-60.1-61

BACT means an emissions limitation, including a visible emission, based on the maximum degree of reduction for each regulated air pollutant which would be emitted from any proposed stationary source or modification which, on a case-by-case basis, the Director, taking into account energy, environmental, and economic impacts and other costs, determines is achievable.

A BACT analysis is required for new or modified sources if the net increase in pollutant emissions exceeds significant levels as defined in HAR §11-60.1-1. The proposed facility **is not subject to a BACT analysis** because emissions from this facility are below that of significant levels. Although not subject to BACT, **water sprays will be used to control fugitive emissions.**

Synthetic Minor Status

A synthetic minor source means a source that has the potential to emit regulated NSR pollutants in amounts at or above thresholds for major sources, but has taken federally enforceable restrictions, so that its potential to emit is below that of amounts for major sources. This source **is not a synthetic minor source** because the facility does not have the potential to emit capturable emissions above major source threshold if operated 8,760 hours per year.

Note that crushing plants are not a listed source in the HAR §11-60.1-1 definition of "Major source," where fugitive emissions (including emissions considered capturable fugitive emissions) from listed sources are included in major source determinations. Fugitive emissions from the crushing plant are considered capturable emissions, but fugitive emissions from related crushing operations (such as stockpiles and unpaved road emissions) are not considered capturable, and therefore emissions from stockpiles and the unpaved road are not included in the major source determination for this facility.

ALTERNATE OPERATING SCENARIOS

None proposed.

PROJECT EMISSIONS

The total project emissions were calculated based on the maximum capacity of the 350 TPH Mobile Crushing Plant, operating continuously for 8,760 hours/year. Assumed seventy (70) percent control efficiency from water sprays for truck unloading, storage piles, and unpaved road emissions.

350 TPH Mobile Crushing Plant Emissions

| 350 TPH Crushing Plant | |
|-------------------------------|-----------------|
| Pollutant | Emissions (tpy) |
| PM | 2.80 |
| PM ₁₀ | 1.27 |
| PM _{2.5} | 0.37 |

(AP-42, Table 11.19.2-2 Controlled Emission Factors)

Storage Pile Emissions

| Wind Erosion from Stockpiles | |
|-------------------------------------|-----------------|
| Pollutant | Emissions (tpy) |
| PM | 6.660 |
| PM ₁₀ | 3.150 |
| PM _{2.5} | 0.477 |

(Emission Factors and Moisture Content calculated based on AP-42, 13.2.4)

(Mean Wind Speed AP 42, Table 7.1-7)

Unpaved Roads Emissions

| Unpaved Road Emissions | |
|-------------------------------|-----------------|
| Pollutant | Emissions (tpy) |
| PM | 53.59 |
| PM ¹⁰ | 15.82 |
| PM _{2.5} | 1.58 |

(Silt Content and Emission Factors from AP-42, 13.2.2) (Precipitation days per year from wrcc.dri.edu/summary/)

Total Facility Emissions

| Total Facility Emissions (tpy) Fugitive (capturable and non-capturable) (8,760 hrs/yr) | | | | |
|---|--|-----------------------------------|-----------------------------------|------------------------|
| Pollutant | 350 TPH Mobile Crushing Plant | Stockpile Wind Erosion | Unpaved Road Emissions | Total Emissions |
| PM | 2.80 | 6.660 | 53.59 | 63.05 |
| PM ₁₀ | 1.27 | 3.150 | 15.82 | 20.24 |
| PM _{2.5} | 0.37 | 0.477 | 1.58 | 2.43 |

AIR QUALITY ASSESMENT

An air quality assessment is not required because the emissions from this facility are fugitive in nature aside from the exempt diesel engine. The Clean Air Brach generally does not do ambient air quality impact assessments for sources exclusively fugitive in nature.

SIGNIFICANT PERMIT CONDITIONS

1. Fugitive Emissions Control
 - a. 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.
 - b. The permittee shall take measures to control and minimize fugitive dust (e.g., wet suppression, enclosures, dust screens, etc.) at all material transfer points, stockpiles, plant roads, loading and unloading operations, and throughout the work yard. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
 - c. Water spray systems shall be maintained and utilized, as necessary, during operation of the crushing plant to ensure compliance with the fugitive emission limits. The Department 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.
 - d. The crushing plant shall not be operated if observation, or the routine inspection required in Attachment II, Special Condition No. D.3.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 systems. 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 systems shall be established during the performance test conducted pursuant to Attachment II, Special Conditions, Section F, and may be incorporated into the permit.
 - e. Water sprays/hoses shall be maintained and utilized as necessary, to minimize fugitive dust from plant operations (e.g., haul roads, storage piles, material transfer, etc.). The Department at any time may require additional water sprays or manual spraying at pertinent locations if an inspection indicates that more fugitive dust control is needed.

- f. 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.).

Reason: The fugitive dust control conditions are incorporated into the permit pursuant to HAR §1-60.1-33.

2. Mobile Crushing Plant Operation

- a. The permittee shall not cause to be discharged into the atmosphere from any 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 conveyers, or from any other affected facility fugitive emissions which exhibit greater than ten (10) percent opacity.
- c. A water pressure gauge and/or flow meter shall be installed, operated, and maintained to measure the pressure and/or flow rate of the water spray systems in psi and/or gallons per minute (gal/min).
- d. The water spray systems, to include the water pump, piping system, spray nozzles, and any gauges (i.e., water pressure, water flow meter, etc.) shall be inspected routinely at least once per month to ensure proper operation of the water spray system.
Inspections of the water spray system shall be recorded in the Inspection, Maintenance, and Repair Log of Attachment II, Special Condition No. D.4.

Reason: The Crushing Plant is subject to 40 CFR Part 60, Subpart 000.

3. Change of Location

- a. The operation of the equipment covered by this temporary CSP shall involve at least one (1) location change during the term of this permit. **Moving within a single property is not considered a location change.**
- b. Location changes of the equipment shall be in accordance with Special Conditions, Attachment II, Section E. For each change in location, the Department reserves the right to impose additional operational controls and restrictions if a site evaluation indicates the controls and/or restrictions are necessary.

Reason: This source is under a temporary CSP and must have a location change during this permit term to keep its status as a temporary source. These terms are incorporated into this permit pursuant to the definition of "temporary covered source" in HAR §11-60.1-81.

CONCLUSION

All emissions were calculated based on the maximum capacity of the crushing plant (350 TPH) and unlimited yearly operations (8,760 hrs/yr); actual emissions should be much lower than those represented in this review. Recommended issuance of a renewal for Temporary CSP No. 0702-01-CT based on the information provided by the Applicant and subject to incorporation of significant permit conditions.

Alex Tokunaga/Catherine Lopez
January 16, 2024

**Application
and
Supporting Information**

ISEMOTO CONTRACTING CO., LTD.
 74-5039B QUEEN KAAHUMANU HWY.
 KAILUA-KONA, HI 96740

APR 12 2013



0702-02

LETTER OF TRANSMITTAL

TO: State Of Hawaii
 Department Of Health
 Clean Air Branch
 P.O. Box 3378
 Honolulu, HI 96801

Date: 4/11/13 ICC Job No:
 Job Name: TCSP# 0702-01-CT

0702 CT
 permit

WE ARE SENDING YOU X ATTACHED UNDER SEPARATE COVER VIA _____

- | | | |
|---|--|---|
| <input type="checkbox"/> CONTRACT | <input type="checkbox"/> PAYMENT REQUEST | <input type="checkbox"/> SUBMITTALS |
| <input type="checkbox"/> CHANGE ORDER | <input type="checkbox"/> CERTIFIED PAYROLL | <input type="checkbox"/> SHOP DRAWINGS |
| <input type="checkbox"/> QUOTATION | <input type="checkbox"/> PROPOSAL | <input type="checkbox"/> SAMPLES |
| <input type="checkbox"/> PURCHASE ORDER | <input type="checkbox"/> COPY OF LETTER | <input type="checkbox"/> PLANS |
| <input type="checkbox"/> WORK ORDER | <input type="checkbox"/> PHOTOGRAPHS | <input type="checkbox"/> SPECIFICATIONS |
| <input checked="" type="checkbox"/> OTHER _____ | | |

| COPIES | DATE | NO. | DESCRIPTION |
|--------|------|-----|--|
| 1 | | | Application for Renewal of Temp. Covered Source Permit No. 0702-01-CT (Crusher Plant "F") |
| 1 | | | Payment Fee |

THESE ARE TRANSMITTED AS CHECKED BELOW

- | | | |
|---|---|---|
| <input type="checkbox"/> FOR APPROVAL | <input type="checkbox"/> APPROVED AS SUBMITTED | <input type="checkbox"/> FOR YOUR INFORMATION |
| <input type="checkbox"/> FOR YOUR USE | <input type="checkbox"/> APPROVED AS NOTED | <input type="checkbox"/> REQUEST FOR _____ |
| <input type="checkbox"/> AS REQUESTED | <input type="checkbox"/> RETURNED FOR CORRECTIONS | <input type="checkbox"/> SUBMIT _____ COPIES FOR DISTRIBUTION |
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| <input type="checkbox"/> FOR BIDS DUE ON _____ | <input type="checkbox"/> RETURNING _____ SETS OF PRINTS | <input type="checkbox"/> OTHER _____ FOR SIGNATURE |

REMARKS:

COPIES TO: File

SIGNED: Denise Pila
 for Jerry Y. Egami
 Senior Vice President

PHONE: (808) 329-8051

FAX: (808) 329-3261

MO 23 047

000006
APR 11 2013
POSTMARKED
APR 11 2013
DATE

**Application for Renewal of
Temporary Covered Source Permit # 0702-01-CT**

FACILITY NAME:

**350 TPH Mobile Crushing Plant with 275 HP Diesel Engine
located at
Various Temporary Sites, State of Hawaii**

OWNER:

**ISEMOTO CONTRACTING CO. LTD
74-5039B Queen Kaahumanu Hwy
Kailua-Kona, HI 96740**

April 5, 2013

PREPARED BY:

**EnvironMETeo Services Inc.
94-463 Ukee Street, Suite A,
Waipahu, Hawaii 96797**

EMET Ref. # 1304178

INTRODUCTION

This is an application for a renewal of permit no. 0702-01-CT for 350 TPH Mobile Crushing Plant with 275 HP Diesel Engine, owned and operated by ISEMOTO CONTRACTING CO. LTD, 74-5039B Queen Kaahumanu Hwy, Kailua-Kona, HI 96740.

There are no changes to the existing permit conditions, permitted equipment, operation, and/or operating scenarios.

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1. STANDARD PERMIT APPLICATION FORM S-1

File/Application No.: 0702-01-CT

STANDARD PERMIT APPLICATION FORM
HAWAII DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
CLEAN AIR BRANCH

P.O. Box 3378 • Honolulu, HI 96801-3378 • Phone: (808) 586-4200

1. Company Name: **ISEMOTO CONTRACTING CO., LTD.**
2. Facility Name (if different from the Company): **350 TPH MOBILE CRUSHING PLANT WITH 275 HP CATERPILLAR DIESEL ENGINE**
3. Mailing Address: **74-5039B QUEEN KAAHUMANU HWY**
City: **KAILUA-KONA** State: **HI** Zip Code: **96740**
Phone Number: **(808) 329-8051**
4. Name of Owner/Owner's Agent: **JERRY EGAMI**
Title: **SENIOR VICE PRESIDENT** Phone: **(808) 329-8051**
Mailing Address: **74-5039B QUEEN KAAHUMANU HWY**
City: **KAILUA-KONA** State: **HI** Zip Code: **96740**
5. Plant Site Manager/Other Contact: **JERRY EGAMI**
Title: **SENIOR VICE PRESIDENT** Phone: **(808) 329-8051**
Mailing Address: **74-5039B QUEEN KAAHUMANU HWY**
City: **KAILUA-KONA** State: **HI** Zip Code: **96740**
6. Permit Application Basis: (Check One.)
Initial Permit for a New Source Initial Permit for an Existing Source
 Renewal of Existing Permit General Permit
Temporary Source Transfer of Permit
Modification: ==> Is Modification? Significant Minor Uncertain
7. If renewal or modification, include existing permit number: **0702-01-CT**
8. Does the Proposed Source require a County Special Management Area Permit? Yes No
9. Type of Source (Check One): Covered Source Covered and PSD Source
 Noncovered Source Uncertain
10. Standard Industrial Classification Code (SICC), if known: **1411**

11. Proposed Equipment/Plant Location Address: **VARIOUS LOCATIONS STATE OF HAWAII
(PRESENT LOCATION ON FILE AT DEPARTMENT OF HEALTH, CLEAN AIR BRANCH)**

City: State: **HI** Zip Code:

UTM Coordinates: **ON FILE AT DOH, CAB**

12. General Nature of Business: **STONE PROCESSING PLANT**

13. Date of Planned Commencement of Construction or Modification: **N/A**

14. Is *any* of the equipment to be leased to another individual or entity? Yes No

15. Type of Organization: Corporation Individual Owner Partnership
Government Agency (Government Facility Code):
Other:

Any applicant for a permit who fails to submit any relevant facts or who has submitted incorrect information in any permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application, but prior to the issuance of the noncovered source permit or release of a draft covered source permit. (§11-60.1-64 & 11-60.1-84)

RESPONSIBLE OFFICIAL (as defined in §11-60.1-1):

Name (Last): **EGAMI** (First): **JERRY** (MI):

Title: **SENIOR VICE PRESIDENT** Phone: **(808) 329-8051**

Mailing Address: **74-5039B QUEEN KAAHUMANU HWY**

City: **KAILUA-KONA** State: **HI** Zip Code: **96740**

CERTIFICATION by Responsible Official (pursuant to §11-60.1-4)

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 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.

NAME (Print/Type): **JERRY EGAMI, ^{EXECUTIVE VP} SENIOR VICE PRESIDENT**

(Signature): 

Date: 4/10/13

0702-02
VARIOUS
4/11/13

(Make as many copies of this page as necessary)

EMISSIONS UNITS TABLE

REVIEW OF APPLICATIONS AND ISSUANCE OF PERMITS WILL BE EXPEDITED BY SUPPLYING ALL NECESSARY INFORMATION ON THIS TABLE.

| AIR POLLUTANT DATA: EMISSION POINTS | | | AIR POLLUTANT EMISSION RATE | | | UTM COORDINATES | | | STACK SOURCE PARAMETERS | | | | | | |
|-------------------------------------|---|-------------|-----------------------------|------------------------------------|--------------|-----------------|-------|----------|-------------------------|-------------------------|--------------|-----------------|-----------|-------------------------|----------------|
| STACK NO. | EQUIPMENT NAME/ DESCRIPTION AND SICC CODE | EQUIP. DATE | AIR POLLUTANT | REGULATED HAZARD. AIR POLLUT. NAME | # / HOUR | TONS/ YEAR | ZONE | EAST (M) | NORTH (M) | HEIGHT ABOVE GROUND (M) | DIRECT | INSIDE DIA. (M) | VEL (M/S) | ACTUAL FLOW RATE (M3/S) | TEMP. DEGREE K |
| | 350 TPH MOBILE CRUSHING PLANT | | | Fugitive Dust | | | On | File | At | N/A | N/A | N/A | N/A | N/A | N/A |
| | | | | | | | Clean | Air | Branch | | | | | | |
| | | | | | | | | | | | | | | | |
| | ACTIVITY | | | | TSP #/HOUR | TSP #/HOUR | | | PM10 #/HOUR | PM10 #/HOUR | PM2.5 #/HOUR | PM2.5 #/HOUR | | | |
| | Uncontrolled Primary Crushing | | | | 0.840 | 0.874 | | | 0.840 | 0.874 | 0.252 | 0.262 | | | |
| | Uncontrolled Conv. Transfer Pts (4) | | | | 4.200 | 4.368 | | | 1.540 | 1.602 | 0.462 | 0.480 | | | |
| | Uncontrolled Truck unloading | | | | 0.035 | 0.036 | | | 0.035 | 0.036 | 0.011 | 0.011 | | | |
| | Uncontrolled Wind Erosion Storage | | | | 9.925 | 10.322 | | | 4.694 | 4.882 | 1.408 | 1.465 | | | |
| | Uncontrolled Unpaved Roads Emiss. | | | | 17.582 | 18.285 | | | 5.382 | 5.598 | 0.538 | 0.560 | | | |
| | Total Uncontrolled | | | | 32.582 | 33.885 | | | 12.491 | 12.992 | 2.671 | 2.778 | | | |
| | Less 70% control | | | | 22.807 | 23.720 | | | 8.744 | 9.094 | 1.870 | 1.945 | | | |
| | TOTAL CONTROLLED | | | | 9.775 | 10.165 | | | 3.747 | 3.898 | 0.801 | 0.833 | | | |

2. SECTION I

SECTION I

A: EQUIPMENT SPECIFICATIONS

As listed in Permit No. 0702-01-CT, Attachment II, Section A "Equipment Description". There are no changes to permitted equipment.

Jaw Crusher:

Manufacturer : Powerscreen
Model : XA 400 Premiertrak
Serial Number : 40048DFXA
Maximum Throughput : 350 TPH

Diesel Engine:

Manufacturer : Caterpillar
Model : C-9
Serial Number : MBD01447
Maximum Power : 275 HP

part 2 NOx cont.

Equipment information is on file under Permit no. 0702-01-CT at the Department of Health (DOH), Clean Air Branch (CAB).

2007

B: DETAILED DESCRIPTION OF PROCESSES & PRODUCTS

There are no changes to existing processes and products.

Standard industrial classification code (SICC): 1411

The raw material consists of basalt rock.

The raw material is loaded by front-end loader into the grizzly feeder of the jaw crusher. Undersize material is diverted onto the side of the jaw crusher. The rest of the material travels through the crusher onto a conveyor belt which feeds it onto a stockpile.

B: 1. AIR POLLUTION CONTROL EQUIPMENT & MONITORING DEVICES

There are no changes to existing air pollution control equipment & monitoring devices.

Pollutants from the facility are fugitive dust and emissions from the diesel engine.

A dust suppression system consisting of water spray nozzles is installed on the jaw crusher and conveyor belts. Details are on file with the DOH, CAB, under permit 0702-01-CT.

A water truck is used to control fugitive dust emissions on the access roads and the plant area.

B: 2. INSIGNIFICANT ACTIVITIES

There are no changes to existing insignificant activities.

Insignificant activities are on file with the DOH, CAB, under permit 0702-01-CT.

C: TYPICAL OPERATING SCHEDULES

There are no changes to existing operating schedules.

Operating hours of this plant (jaw crusher and diesel engine) are restricted by permit no. 0702-01-CT to not more than 2080 hours in any rolling 12 month period.

This plant operates irregularly, with operation depending on job situation and demand.

When operating, the plant typically operates 10 hours per day, 5 days per week.

D: APPLICABLE REQUIREMENTS

- Hawaii Administrative Rules (HAR) Title 11
 - Chapter 11-59, Ambient Air Quality Standards
 - Chapter 11-60.1 Air Pollution Control
 - Subchapter 1, General Requirements
 - Subchapter 2, General Prohibitions
 - 11-60.1-31 Applicability
 - 11-60.1-32 Visible Emissions
 - 11-60.1-33 Fugitive Dust
 - 11-60.1-38 Sulfur Oxides from Fuel Combustion
 - Subchapter 5, Covered Sources
 - Subchapter 6, Fees for Covered Sources
 - Subchapter 8, Standards of Performance for Stationary Sources
 - 11-60.1-161 New Source Performance Standards
- 40 Code of Federal Regulations (CFR) Part 60 – Standards of Performance for New Stationary Sources
 - Subpart A – General Provisions
 - Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

D: 1. TEST METHODS

Method 9 to determine opacity

D: 2. EXEMPTIONS

Not applicable

E: CURRENT OPERATIONAL LIMITATIONS OR WORK PRACTICES

There are no changes to operational limitations or work practices as set out in the existing permit no. 0702-01-CT.

The jaw crusher 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.

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:

1. At the feeder to the crusher
2. At the exit of the crusher to the finished material conveyor
3. At the exit of the crusher to the side material conveyor

A water truck shall be maintained and utilized as necessary to minimize fugitive dust on unpaved haul roads, unpaved plant area, and stockpiles.

The diesel engine shall be fired on diesel fuel #2 with a sulfur content not to exceed 0.0015% by weight, a cetane index of minimum forty (40), and a aromatic content of maximum thirty-five (35) volume percent.

F: SCHEDULE FOR CONSTRUCTION OR MODIFICATION

Not applicable

G: ASSESSMENT OF AMBIENT AIR QUALITY IMPACT

No assessment of ambient air quality impact has been performed since there are no changes to equipment and/or operational limitations or work practices.

Assessments of the ambient air quality impact previously performed are on file at the DOH, CAB, under permit no. 0702-01-CT.

H: ASSESSMENT OF AMBIENT AIR QUALITY IMPACT FOR NEW COVERED SOURCES AND SIGNIFICANT MODIFICATIONS

Not applicable

I: NEW COVERED SOURCES AND SIGNIFICANT MODIFICATIONS SUBJECT TO SUBCHAPTER 7 OF CHAPTER 11-60.1

Not applicable

J: EMISSION TRADING

Not applicable

K: COMPLIANCE PLAN & COMPLIANCE CERTIFICATION

Detailed on attached forms C-1 and C-2

COMPLIANCE PLAN

The Responsible Official shall submit a Compliance Plan with the following permit applications, and at such other times as requested by the director.

- Initial Noncovered Source Permit Application
- Temporary Noncovered Source Permit Application
- General Noncovered Source Permit Application
- Application for a Noncovered Source Permit Renewal
- Application for a Modification to a Noncovered Source
- Initial Covered Source Permit Application
- Temporary Covered Source Permit Application
- General Covered Source Permit Application
- Application for a Covered Source Permit Renewal
- Application for a Significant Modification to a Covered Source

1. Compliance status with respect to all Applicable Requirements:

Will your facility be in compliance, or Is your facility in compliance, with all applicable requirements in effect at the time of your permit application submittal?

YES {If YES, complete items a and c below}

NO {If NO, complete items a-c below}

a. Identify all applicable requirement(s) for which compliance is achieved:

- 11-60.1-32 Visible Emissions**
- 11-60.1-33 Fugitive Dust**
- 11-60.1-38 Sulfur Oxides from Fuel Combustion**
- 11-60.1-81 Subchapter 5, Covered Sources**
- 11-60.1-91 Temporary Covered Source Permits**
- 11-60.1-111 Subchapter 6, Fees**
- 40CFR60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Plants**

Provide a statement that the source is in compliance and will continue to comply with all such requirements.

ISEMOTO CONTRACTING CO. LTD states that the plant is in compliance with and will continue to comply with all the above applicable requirements.

b. Identify all applicable requirement(s) for which compliance is NOT achieved:

N/A

Provide a detailed Schedule of Compliance and a description of how the source will achieve compliance with all such applicable requirements. Use separate sheets of paper, if necessary.

| <u>Description of Remedial Action</u> | <u>Expected Date of Completion</u> |
|---------------------------------------|------------------------------------|
|---------------------------------------|------------------------------------|

N/A

c. Identify any other applicable requirement(s) with a future compliance date that your source is subject to. These applicable requirements may be in effect AFTER permit issuance:

| <u>Applicable Requirement</u> | <u>Effective Date</u> | <u>Currently in Compliance?</u> |
|-------------------------------|-----------------------|---------------------------------|
|-------------------------------|-----------------------|---------------------------------|

N/A

If the source is not currently in compliance, submit a Schedule of Compliance and a description of how the source will achieve compliance with all such applicable requirements:

| <u>Description of Proposed Action/Steps to Achieve Compliance</u> | <u>Expected Date of Achieving Compliance</u> |
|---|--|
|---|--|

N/A

Provide a statement that the source on a timely basis will meet all these applicable requirements.

N/A

If the expected date of achieving compliance will NOT meet the applicable requirement's effective date, provide a more detailed description of all remedial actions and the expected dates of completion.

| <u>Description of Remedial Action</u> | <u>Expected Date of Completion</u> |
|---------------------------------------|------------------------------------|
|---------------------------------------|------------------------------------|

N/A

2. Compliance Progress Reports:

a. If a compliance plan is being submitted to remedy a violation, complete the following information:

Frequency of Submittal: (less than or equal to 6 months) Beginning Date:

b. Date(s) that the Action described in (1)(b) was achieved: Remedial Action Date Achieved

N/A

c. Narrative description of why any date(s) in (1)(b) was not met, and any preventive or corrective measures taken in the interim:

N/A

Certification of Compliance with all Applicable Requirements:

This certification must be signed by a Responsible Official. Applications without a signed certification will be deemed incomplete.

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 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.

Name (Print/Type): Jerry Egami, Executive Vice President

(Signature): [Handwritten Signature] Date: 4/10/13

COMPLIANCE CERTIFICATION

The Responsible Official shall submit a Compliance Certification with the following covered source permit applications, and at such other times as requested by the director. (Complete as many copies of this form as necessary).

- Initial Covered Source Permit Application;
- Temporary Covered Source Permit Application;
- General Covered Source Permit Application;
- X** Application for a Covered Source Permit Renewal; and
- Application for a Significant Modification to a Covered Source.

During the term of a covered source permit, the responsible official shall also submit a Compliance Certification to the director and the Administrator at least every six months, or more frequently as set by an applicable requirement.

INITIAL COVERED SOURCE PERMIT APPLICATION: COMPLETE & SUBMIT THIS COVER PAGE AND SECTION A OF THIS FORM.

DURING THE TERM OF A COVERED SOURCE PERMIT: COMPLETE & SUBMIT THIS COVER PAGE AND SECTION B OF THIS FORM.

Certification of Compliance with all Applicable Requirements:

This certification must be signed by a Responsible Official. Applications without a signed certification will be deemed incomplete.

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 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.

Name (Print/Type): **Jerry Egami, ^{EXECUTIVE VP} Senior Vice President**

(Signature):  Date: 4/10/13

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

A. For compliance certifications submitted with any covered source permit application.

1. Schedule for submission of Compliance Certifications during the term of the permit:
Frequency of Submittal: **Annual** Beginning Date: **Permit Date**

2. Emissions Unit No./Description: **350 TPH Mobile Crushing Plant with 275 HP Diesel Engine**

3. Identify the applicable requirement(s) that is/are the basis of this certification:

11-60.1-32 Visible Emissions
11-60.1-33 Fugitive Dust
11-60.1-38 Sulfur Oxides from Fuel Combustion
11-60.1-81 Subchapter 5, Covered Sources
11-60.1-91 Temporary Covered Source Permits
11-60.1-111 Subchapter 6, Fees
40 CFR 60, Subpart 000, Standards of Performance for Nonmetallic Mineral Plants

4. Compliance status:
 - a. Will the emissions unit be in compliance with the identified applicable requirement(s)?
 YES NO

 - b. If YES, will compliance be continuous or intermittent?
 Continuous Intermittent

 - c. If NO, explain.

5. The methods to be used in determining compliance of the emissions unit with the applicable requirement(s), including any monitoring, recordkeeping, reporting requirements, and/or test methods:

OPACITY TESTING, METHOD 9
MONTHLY OPACITY TESTING BY CERTIFIED READER
MONTHLY RECORD KEEPING

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

**DAILY VISUAL CHECKS BY OPERATOR
TESTS WILL BE CONDUCTED IN COMPLIANCE WITH 40 CFR 60
MONTHLY OPACITY TESTING BY CERTIFIED READER
MONTHLY RECORD KEEPING OF OPERATING HOURS, PRODUCTION & FUEL
ANNUAL EMISSIONS REPORTS**

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

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

N/A YES NO

b. If YES, identify the requirements and the provisions being taken to achieve compliance:

N/A

c. If NO, describe below which requirements will not be met:

N/A

| |
|------------------------------------|
| FOR AGENCY USE ONLY: |
| File/Application No.: _____ |
| Island: _____ |
| Date Received: _____ |

3. SECTION II

RENEWAL APPLICATION FEE

The application fee of \$ 500.00 for a renewal of a non-toxic temporary covered source is enclosed. HAR 11-60.1-113 (4) (C).

Date: 4/10/13 **Check Number:** 1738

Made payable to: "Clean Air Special Fund – COV"

APPENDIX A

LOCATION & SITE MAPS

Location and Site Maps are on file with the
Department of Health,
Clean Air Branch,
Honolulu, HI
Under Permit No. 0702-01-CT

APPENDIX B

POTENTIAL ANNUAL EMISSIONS CALCULATIONS

**Potential Annual Fugitive Dust Emissions
For 350 TPH Jaw Crusher**

Calculation Basis:

Maximum Processing rate : 350 TPH
 Operating hours: 2080 hours/year
 EMISSION FACTORS: AP 42

Fugitive Emissions of Particulate Matter (TSP):

| Activity | SCC | Lb/hr | tpy |
|--|-------------|---------------|---------------|
| Primary Crushing uncontrolled | 3-05-020-01 | 0.840 | 0.874 |
| Conveyor Transfer Point uncontrolled (4) | 3-05-020-06 | 4.200 | 4.368 |
| Truck unloading uncontrolled | 3-05-020-32 | 0.035 | 0.036 |
| Storage Piles uncontrolled | | 9.925 | 10.322 |
| Unpaved Roads uncontrolled | | 17.582 | 18.285 |
| TOTAL UNCONTROLLED | | 32.582 | 33.885 |
| Less Control (70%) | | 22.807 | 23.720 |
| TOTAL CONTROLLED | | 9.775 | 10.165 |

Fugitive Emissions of Particulate Matter (PM10):

| Activity | SCC | Lb/hr | tpy |
|--|-------------|---------------|---------------|
| Primary Crushing uncontrolled | 3-05-020-01 | 0.840 | 0.874 |
| Conveyor Transfer Point uncontrolled (4) | 3-05-020-06 | 1.540 | 1.602 |
| Truck unloading uncontrolled | 3-05-020-32 | 0.035 | 0.036 |
| Storage Piles uncontrolled | | 4.694 | 4.882 |
| Unpaved Roads uncontrolled | | 5.382 | 5.598 |
| TOTAL UNCONTROLLED | | 12.491 | 12.992 |
| Less Control (70%) | | 8.744 | 9.094 |
| TOTAL CONTROLLED | | 3.747 | 3.898 |

Fugitive Emissions of Particulate Matter (PM2.5):

| Activity | SCC | Lb/hr | tpy |
|--|-------------|--------------|--------------|
| Primary Crushing uncontrolled | 3-05-020-01 | 0.252 | 0.262 |
| Conveyor Transfer Point uncontrolled (4) | 3-05-020-06 | 0.462 | 0.480 |
| Truck unloading uncontrolled | 3-05-020-32 | 0.011 | 0.011 |
| Storage Piles uncontrolled | | 1.408 | 1.465 |
| Unpaved Roads uncontrolled | | 0.538 | 0.560 |
| TOTAL UNCONTROLLED | | 2.671 | 2.778 |
| Less Control (70%) | | 1.870 | 1.945 |
| TOTAL CONTROLLED | | 0.801 | 0.833 |

Emission calculations based on CEIDARS table PM2.5 fractions, Mineral Products, Crushing, Screening, Blasting, Loading and Unloading, where PM2.5 equals 0.3 of PM10.

Potential Annual Emissions
For
275 HP Caterpillar Diesel Engine

EMISSION CALCULATIONS:

Emission calculations are based on AP42, tables 3.3-1&3, 10/96, max. fuel consumption of 14.7 gallons/hour and a restriction of 2,080 hours per year.

| Pollutant | Lbs/hour | tpy |
|----------------------|-----------------|------------|
| NOx | 8.883 | 9.239 |
| CO | 1.914 | 1.990 |
| SO2 (Sulfur Balance) | 0.031 | 0.033 |
| PM | 0.625 | 0.650 |
| PM10 | 0.625 | 0.650 |
| PM2.5 | 0.625 | 0.650 |
| CO2 | 330.352 | 343.566 |
| Aldehydes | 0.141 | 0.147 |
| TOC | 0.725 | 0.754 |
| Benzene | 1.88E-03 | 1.95E-03 |
| Toluene | 8.24E-04 | 8.57E-04 |
| Xylenes | 5.74E-04 | 5.97E-04 |
| Propylene | 5.20E-03 | 5.40E-03 |
| 1,3 Butadiene | 7.88E-05 | 8.19E-05 |
| Formaldehyde | 2.38E-03 | 2.47E-03 |
| Acetaldehyde | 1.54E-03 | 1.61E-03 |
| Acrolein | 1.86E-04 | 1.94E-04 |
| Naphthalene | 1.71E-04 | 1.78E-04 |
| TOTAL HAP's | 1.28E-02 | 1.33E-02 |
| TOTAL PAH | 3.38E-04 | 3.52E-04 |
| NH3 | 0.043 | 0.044 |

| Calculations of Emissions for Crushed Stone Processing Operations | | | | |
|---|-------------------------------|-------------|---------|------------------------------------|
| Client: | ISEMOTO CONTRACTING CO. LTD | | | Date: |
| Facility: | 350 TPH MOBILE CRUSHING PLANT | | | 4/5/2013 |
| Permit No.: | 0702-01-CT | JOB# | 1304178 | |
| Annual Production Rate Calculations: | | | | |
| INPUT FIELDS: | hrs/year | 2080 | | Annual Production (tpy) |
| cy/hr | 0 tons/hr | 350 | | |
| | Transfer Points | 4 | | Annual Production (cy/year) |
| | | | | 728,000 |
| | | | | 0 |

Conversion rate "stone crushed" cy to ton = 1.35 Source: (www.enviromineinc.com/conversion_calculator.htm)

EMISSION CALCULATIONS FOR TOTAL PART. MATTER (AP42, table 11.19.2-2, 8/04)

| Source | SCC | Em.Factor (lb/ton) | lbs/hour | Tons/Year |
|-----------------------------|----------------|--------------------|----------|-----------|
| Primary Crushing | 3-05-020-01 | N/D | 0.000 | 0.000 |
| Primary Crushing contr. | 3-05-020-01 | N/D | 0.000 | 0.000 |
| Secondary Crushing | 3-05-020-02 | N/D | 0.000 | 0.000 |
| Secondary Crushing contr. | 3-05-020-02 | N/D | 0.000 | 0.000 |
| Tertiary Crushing | 3-05-020-03 | 0.00540 | 1.890 | 1.966 |
| Tertiary Crushing contr. | 3-05-020-03 | 0.00120 | 0.420 | 0.437 |
| Fines Crushing | 3-05-020-05 | 0.03900 | 13.650 | 14.196 |
| Fines Crushing contr. | 3-05-020-05 | 0.00300 | 1.050 | 1.092 |
| Screening | 3-05-020-02,03 | 0.02500 | 8.750 | 9.100 |
| Screening contr. | 3-05-020-02,03 | 0.00220 | 0.770 | 0.801 |
| Fines Screening | 3-05-020-21 | 0.30000 | 105.000 | 109.200 |
| Fines Screening contr. | 3-05-020-21 | 0.00360 | 1.260 | 1.310 |
| Conveyor Transfer Point | 3-05-020-06 | 0.00300 | 1.050 | 1.092 |
| Conv. Transfer Point contr. | 3-05-020-06 | 0.00014 | 0.049 | 0.051 |
| Wet Drilling - Unfrag.Stone | 3-05-020-10 | N/D | 0.000 | 0.000 |
| Truck unload - Fragm.Stone | 3-05-020-31 | N/D | 0.000 | 0.000 |
| Truck unload - conv.crushed | 3-05-020-32 | N/D | 0.000 | 0.000 |

EMISSIONS IN BOLD ONLY ARE USED FOR EMISSION CALCULATIONS FOR THIS PLANT!

Uncontrolled Emission Calculations for multiple Transfer Points:

| | | | | | |
|---------------|---|--------------------|-------|--------|-------|
| No of Points: | 4 | lbs/hr per point | 1.050 | Total: | 4.2 |
| No of Points: | 4 | tons/year per poin | 1.092 | Total: | 4.368 |

EMISSION CALCULATIONS FOR STORAGE PILES ONLY:

| Wind Erosion from Storage Piles (AP42, 13.2.4, 11/06): | | | | Average Annual Windspeeds for Hawaii (AP42,7.1-9) | |
|---|------------------|-----------------|---------------|---|------------------------|
| Formula: $E = k(0.0032) \times [((U/5)^{1.3}) / ((M/2)^{1.4})]$ | | | | Hilo | 7.2 mph |
| where: E=emission factor, k=particle size multiplier(dimensionless) | | | | Honolulu | 11.4 mph |
| U=mean wind speed (mph), M=material moisture content (%) | | | | Kahului | 12.8 mph |
| | | | | Lihue | 12.2 mph |
| | | | | State Average | 10.9 mbh |
| k (TSP) | k (PM-10) | U | M | | |
| 0.74 | 0.35 | 10.9 | 0.7 | | |
| AP42,13.2.4 | AP42,13.2.4 | AP42,7.1-9 | AP42,13.2.4-1 | | |
| Emission Factor lb/ton: | | | | Total TSP (lb/hr) | Total TSP (tpy) |
| PM-10 | 0.013 | Ann.Prod. (tpy) | | | |
| TSP | 0.028 | 728,000 | | 9.925 | 10.322 |
| TOTAL TSP CONTROLLED (-70%)FOR STORAGE PILES | | | | 2.978 | 3.097 |
| PM-10 UNCONTROLLED: | | | | 4.882 tons/year | |

EMISSION CALCULATIONS FOR TOTAL PM-10 (AP42, table 11.19.2-2, 8/04)

| Source | SCC | Em.Factor (lb/ton) | lbs/hour | Tons/Year |
|-----------------------------|----------------|-----------------------|----------|-----------|
| *Primary Crushing | 3-05-020-01 | 0.00240 | 0.840 | 0.874 |
| *Primary Crushing contr. | 3-05-020-01 | 0.00054 | 0.189 | 0.197 |
| *Secondary Crushing | 3-05-020-02 | 0.00240 | 0.840 | 0.874 |
| *Secondary Crushing contr. | 3-05-020-02 | 0.00054 | 0.189 | 0.197 |
| Tertiary Crushing | 3-05-020-03 | 0.00240 | 0.840 | 0.874 |
| Tertiary Crushing contr. | 3-05-020-03 | 0.00054 | 0.189 | 0.197 |
| Fines Crushing | 3-05-020-05 | 0.01500 | 5.250 | 5.460 |
| Fines Crushing contr. | 3-05-020-05 | 0.00120 | 0.420 | 0.437 |
| Screening | 3-05-020-02,03 | 0.00870 | 3.045 | 3.167 |
| Screening contr. | 3-05-020-02,03 | 0.00074 | 0.259 | 0.269 |
| Fines Screening | 3-05-020-21 | 0.07200 | 25.200 | 26.208 |
| Fines Screening contr. | 3-05-020-21 | 0.00220 | 0.770 | 0.801 |
| Conveyor Transfer Point | 3-05-020-06 | 0.00110 | 0.385 | 0.400 |
| Conv. Transfer Point contr. | 3-05-020-06 | 4.60E-05 | 0.016 | 0.017 |
| Wet Drilling - Unfrag.Stone | 3-05-020-10 | 8.00E-05 | 0.028 | 0.029 |
| Truck unload - Fragm.Stone | 3-05-020-31 | 1.60E-05 | 0.006 | 0.006 |
| Truck unload - conv.crushed | 3-05-020-32 | 0.00010 | 0.035 | 0.036 |

EMISSIONS IN **BOLD ONLY** ARE USED FOR EMISSION CALCULATIONS FOR THIS PLANT!

*Tertiary Crushing Emission Factors are used (AP42, table 11.19.2-2, Footnote n)

| Uncontrolled Emission Calculations for multiple Transfer Points: | | | | |
|--|----------|---------------------|--------------|---------------------|
| No of Points: | 4 | lbs/hr per point | 0.385 | Total: 1.540 |
| No of Points: | 4 | tons/year per point | 0.400 | Total: 1.602 |

| EMISSION CALCULATIONS FOR STORAGE PILES ONLY: | | | | | |
|--|------------------|------------------|---------------|---|--------------------|
| Wind Erosion from Storage Piles (AP42, 13.2.4): | | | | Average Annual Windspeeds for Hawaii (AP42,7.1-9) | |
| Formula: $E = k(0.0032) \times \left[\frac{((U/5)^{1.3})}{((M/2)^{1.4})} \right]$ | | | | Hilo | 7.2 mph |
| where: E=emission factor, k=particle size multiplier(dimensionless) | | | | Honolulu | 11.4 mph |
| U=mean wind speed (mph), M=material moisture content (%) | | | | Kahului | 12.8 mph |
| k (TSP) | k (PM-10) | U | M | Lihue | 12.2 mph |
| 0.74 | 0.35 | 10.9 | 0.7 | State Average | 10.9 mbh |
| AP42,13.2.4 | AP42,13.2.4 | AP42,7.1-9 | AP42,13.2.4-1 | | |
| Emission Factor lb/ton: | | | | Total PM-10 | Total PM-10 |
| PM-10 | 0.013 | Ann.Prod. | | (lb/hr) | (tpy) |
| TSP | 0.028 | (tpy) | | | |
| | | 728,000 | | 4.694 | 4.882 |
| PM-10 CONTROLLED (-70%)FOR STORAGE PILES | | | | 1.408 | 1.465 |

EMISSION CALCULATIONS FOR PM2.5 (AP42, table 11.19.2-2, 8/04)

Emission calculations based on CEIDARS table PM2.5 fractions, Mineral Products, Crushing, Screening, Blasting, Loading and Unloading where PM2.5 equals 0.3 of PM10.

| Source | SCC | Em.Factor (lb/ton) | lbs/hour | Tons/Year |
|------------------------------|----------------|-----------------------|----------|-----------|
| Primary Crushing* | 3-05-020-01 | 0.00072 | 0.252 | 0.262 |
| Primary Crushing contr. | 3-05-020-01 | 0.00016 | 0.057 | 0.059 |
| Secondary Crushing* | 3-05-020-02 | 0.00072 | 0.252 | 0.262 |
| Secondary Crushing contr. | 3-05-020-02 | 0.00016 | 0.057 | 0.059 |
| Tertiary Crushing* | 3-05-020-03 | 0.00072 | 0.252 | 0.262 |
| Tertiary Crushing contr. | 3-05-020-03 | 0.00016 | 0.057 | 0.059 |
| Fines Crushing* | 3-05-020-05 | 0.00450 | 1.575 | 1.638 |
| Fines Crushing contr. | 3-05-020-05 | 0.00036 | 0.126 | 0.131 |
| Screening* | 3-05-020-02,03 | 0.00261 | 0.914 | 0.950 |
| Screening contr. | 3-05-020-02,03 | 0.00022 | 0.078 | 0.081 |
| Fines Screening* | 3-05-020-21 | 0.02160 | 7.560 | 7.862 |
| Fines Screening contr.* | 3-05-020-21 | 0.00066 | 0.231 | 0.240 |
| Conveyor Transfer Point* | 3-05-020-06 | 0.00033 | 0.116 | 0.120 |
| Conv. Transfer Point contr. | 3-05-020-06 | 1.38E-05 | 0.005 | 0.005 |
| Wet Drilling - Unfrag.Stone* | 3-05-020-10 | 2.40E-05 | 0.008 | 0.009 |
| Truck unload - Fragm.Stone* | 3-05-020-31 | 4.80E-06 | 0.002 | 0.002 |
| Truck unload - conv.crushed* | 3-05-020-32 | 0.00003 | 0.011 | 0.011 |

EMISSIONS IN BOLD ONLY ARE USED FOR EMISSION CALCULATIONS FOR THIS PLANT!

Storage Piles

| | Emission PM10 | Emission PM2.5 |
|-----------|---------------|-------------------------------------|
| lbs/hour | 4.694 | 1.408 (PM10 emissions x 0.3) |
| tons/year | 4.882 | 1.465 (PM10 emissions x 0.3) |

Un-Controlled Emission Calculations for multiple Transfer Points:

| | | | | |
|---------------|-----------------------|-----------------|--------|--------------|
| No of Points: | 4 lbs/hr per point | 1.16E-01 | Total: | 0.462 |
| No of Points: | 4 tons/year per point | 1.20E-01 | Total: | 0.480 |

| Calculations of PM30 (TSP) Emissions for Unpaved Roads | | | | |
|--|-------------------------------|-------------|------------|---------------|
| Client: | ISEMOTO CONTRACTING CO. LTD | | | |
| Facility: | 350 TPH MOBILE CRUSHING PLANT | | | |
| Date: | 4/4/2013 | PERMIT NO.: | 0702-01-CT | JOB # 1304178 |

Equation 1a (Industrial Site) AP-42, 13.2.2 Unpaved Roads, 11/06
 $E = k (s/12)^a (W/3)^b$
 where:
 E = size-specific emission factor (lb/VMT)
 k,a,b,c = constant (lb/VMT)
 s = surface material silt content (%)
 W = mean vehicle weight (tons)
 p = number of days with at least 0.01 inches of precipitation per year
 VMT = vehicle mile travelled

Silt content for stone quarrying & processing plant roads (AP-42, table 13.2.2-1):
 Plant Road: 10% Haul Road: 8.30%

Table 13.2.2-2. Constants for industrial roads (equation 1a):

| Constant | PM-2.5 | PM-10 | PM-30 | | |
|------------|--------|-------|-------|--|--|
| k (lb/VMT) | 0.15 | 1.5 | 4.9 | | |
| a | 0.9 | 0.9 | 0.7 | | |
| b | 0.45 | 0.45 | 0.45 | | |
| c | n/a | n/a | n/a | | |
| d | n/a | n/a | n/a | | |

Ranges of source conditions for equation (AP-42, 13.2.2.-3):
 Road silt content: 1.2 - 35%
 Mean vehicle weight: 1.5 - 290 tons
 Mean vehicle speed: 5-55 mph
 Mean number of wheels: 4-7
 Surface moisture content: 0.03-20%

Mean vehicle weight determination:
 Average weight empty: 16 t
 Average weight full: 37 t
 Average vehicle weight: 26.5 t

Input:

| | | | |
|---|--------|------------------------|----------------------------|
| k (particle size multiplier) PM30 | 4.900 | *AP42,13.2.2, Dec.2003 | Result: (lb/VMT) |
| s (silt content of road) (%) | 3.900 | | |
| W (mean vehicle weight) (tons) | 26.500 | | |
| M (surface material moisture content) (%) | 0.2 | | |
| S (mean vehicle speed) (mph) | 10 | | |
| p (# of days with 0.01" of rain/year) | 106 | PM-30 | 4.220 |

Total vehicle miles travelled per year:
 (Max TPH Throughput x Hours/Year / Truck Payload x Distance Travelled)

| TPH | Hours/year | Truck Load (T) | Distance (M) | VMT/year |
|-----|------------|----------------|--------------|----------|
| 350 | 2080 | 21 | 0.25 | 8666.7 |

| | |
|--|--------|
| Uncontrolled PM30 in tons per year for unpaved roads: | 18.285 |
| Controlled PM30 (tpy) for unpaved roads (-70%): | 5.486 |
| Uncontrolled PM30 in lbs/hr | 17.582 |
| Controlled PM30 in lbs/hr | 5.275 |

| | | |
|--|--|--|
| | | |
|--|--|--|

| Calculations of PM10 Emissions for Unpaved Roads | | | | |
|--|-------------------------------|-------------|------------|---------------|
| Client: | ISEMOTO CONTRACTING CO. LTD | | | |
| Facility: | 350 TPH MOBILE CRUSHING PLANT | | | |
| Date: | 4/4/2013 | PERMIT NO.: | 0702-01-CT | JOB # 1304178 |

Equation 1a (Industrial Site) AP-42, 13.2.2 Unpaved Roads, 11/06

$E = k (s/12)^a (W/3)^b$
 where:
 E = size-specific emission factor (lb/VMT)
 k, a, b, c = constant (lb/VMT)
 s = surface material silt content (%)
 W = mean vehicle weight (tons)
 p = number of days with at least 0.01 inches of precipitation per year
 VMT = vehicle mile travelled

Silt content for stone quarrying & processing plant roads (AP-42, table 13.2.2-1):

| | | | |
|-------------|-----|------------|-------|
| Plant Road: | 10% | Haul Road: | 8.30% |
|-------------|-----|------------|-------|

Table 13.2.2-2. Constants for industrial roads (equation 1a):

| Constant | PM-2.5 | PM-10 | PM-30 | | |
|------------|--------|-------|-------|--|--|
| k (lb/VMT) | 0.15 | 1.5 | 4.9 | | |
| a | 0.9 | 0.9 | 0.7 | | |
| b | 0.45 | 0.45 | 0.45 | | |
| c | n/a | n/a | n/a | | |
| d | n/a | n/a | n/a | | |

Ranges of source conditions for equation (AP-42, 13.2.2.-3):

| | |
|-------------------------------------|------------------------------------|
| Road silt content: 1.2 - 35% | Mean vehicle weight determination: |
| Mean vehicle weight: 1.5 - 290 tons | Average weight empty: 16 t |
| Mean vehicle speed: 5-55 mph | Average weight full: 37 t |
| Mean number of wheels: 4-7 | Average vehicle weight: 26.5 t |
| Surface moisture content: 0.03-20% | |

| Input: | | | | |
|---|--------|-------------------------|--|-----------------|
| k (particle size multiplier) PM-10 | 1.500 | | | |
| s (silt content of road) (%) | 3.900 | *AP42, 13.2.2, Dec.2003 | | |
| W (mean vehicle weight) (tons) | 26.500 | | | |
| M (surface material moisture content) (%) | 0.2 | | | Result: |
| S (mean vehicle speed) (mph) | 10 | | | (lb/VMT) |
| p (# of days with 0.01" of rain/year) | 106 | PM-10 | | 1.292 |

Total vehicle miles travelled per year:
 (Max TPH Throughput x Hours/Year / Truck Payload x Distance Travelled)

| TPH | Hours/year | Truck Load (T) | Distance (M) | VMT/year |
|-----|------------|----------------|--------------|----------|
| 350 | 2080 | 21 | 0.25 | 8666.7 |

| | |
|--|--------------|
| Uncontrolled PM10 in tons per year for unpaved roads: | 5.598 |
| Controlled PM10 (tpy) for unpaved roads (-70%): | 1.679 |
| Uncontrolled PM10 in lbs/hr | 5.382 |
| Controlled PM10 in lbs/hr | 1.615 |

| Calculations of PM2.5 Emissions for Unpaved Roads | | | | |
|---|-------------------------------|-------------|------------|---------------|
| Client: | ISEMOTO CONTRACTING CO. LTD | | | |
| Facility: | 350 TPH MOBILE CRUSHING PLANT | | | |
| Date: | 4/4/2013 | PERMIT NO.: | 0702-01-CT | JOB # 1304178 |

Equation 1a (Industrial Site) AP-42, 13.2.2 Unpaved Roads, 11/06

$E = k (s/12)^a (W/3)^b$
 where:
 E = size-specific emission factor (lb/VMT)
 k, a, b, c = constant (lb/VMT)
 s = surface material silt content (%)
 W = mean vehicle weight (tons)
 p = number of days with at least 0.01 inches of precipitation per year
 VMT = vehicle mile travelled

Silt content for stone quarrying & processing plant roads (AP-42, table 13.2.2-1):

| | | | |
|-------------|-----|------------|-------|
| Plant Road: | 10% | Haul Road: | 8.30% |
|-------------|-----|------------|-------|

Table 13.2.2-2. Constants for industrial roads (equation 1a):

| Constant | PM-2.5 | PM-10 | PM-30 |
|------------|--------|-------|-------|
| k (lb/VMT) | 0.15 | 1.5 | 4.9 |
| a | 0.9 | 0.9 | 0.7 |
| b | 0.45 | 0.45 | 0.45 |
| c | n/a | n/a | n/a |
| d | n/a | n/a | n/a |

Ranges of source conditions for equation (AP-42, 13.2.2.-3):

| | |
|-------------------------------------|------------------------------------|
| Road silt content: 1.2 - 35% | Mean vehicle weight determination: |
| Mean vehicle weight: 1.5 - 290 tons | Average weight empty: 16 t |
| Mean vehicle speed: 5-55 mph | Average weight full: 37 t |
| Mean number of wheels: 4-7 | Average vehicle weight: 26.5 t |
| Surface moisture content: 0.03-20% | |

| Input: | | | |
|---|--|--------|-------------------------------------|
| k (particle size multiplier) PM2.5 | | 0.150 | |
| s (silt content of road) (%) | | 3.900 | *AP42,13.2.2, Dec.2003 |
| W (mean vehicle weight) (tons) | | 26.500 | |
| M (surface material moisture content) (%) | | 0.2 | |
| S (mean vehicle speed) (mph) | | 10 | |
| p (# of days with 0.01" of rain/year) | | 106 | |
| | | PM2.5 | Result: (lb/VMT) 0.129 |

Total vehicle miles travelled per year:
 (Max TPH Throughput x Hours/Year / Truck Payload x Distance Travelled)

| TPH | Hours/year | Truck Load (T) | Distance (M) | VMT/year |
|-----|------------|----------------|--------------|----------|
| 350 | 2080 | 21 | 0.25 | 8666.7 |

| | |
|--|--------------|
| Uncontrolled PM30 in tons per year for unpaved roads: | 0.560 |
| Controlled PM30 (tpy) for unpaved roads (-70%): | 0.168 |
| Uncontrolled PM30 in lbs/hr | 0.538 |
| Controlled PM30 in lbs/hr | 0.161 |

KONA AIRPORT 68.3, HAWAII

Period of Record General Climate Summary - Precipitation

1961 - 1990

- [Daily Temp. & Precip.](#)
- [Daily Tabular data \(~23 KB\)](#)
- [Monthly Tabular data \(~1 KB\)](#)
- [NCDC 1961-1990 Normals \(~3 KB\)](#)

Period of Record

- [Station Metadata](#)
- [Station Metadata Graphics](#)

General Climate Summary Tables

- [Temperature](#)
- [Precipitation](#)
- [Heating Degree Days](#)
- [Cooling Degree Days](#)
- [Growing Degree Days](#)
- [Temperature](#)
- [Daily Extremes and Averages](#)
- [Spring 'Freeze' Probabilities](#)
- [Fall 'Freeze' Probabilities](#)
- ['Freeze Free' Probabilities](#)
- [Monthly Temperature Listings](#)
 - [Average](#)
 - [Average Maximum](#)
 - [Average Minimum](#)
 - [Extreme Maximum\(*\)](#)
 - [Extreme Minimum\(*\)](#)

Precipitation

- [Monthly Average](#)
- [Daily Extreme and Average](#)
- [Daily Average](#)

| Station:(514764) KONA AIRPORT 68.3 | | | | | | | | | | | | | | |
|------------------------------------|---------------|-------|------|-------|------|------------|----------------------|-------------|-------------|-------------|----------------|------|------|------|
| From Year=1949 To Year=1980 | | | | | | | | | | | | | | |
| | Precipitation | | | | | | | | | | Total Snowfall | | | |
| | Mean | High | Year | Low | Year | 1 Day Max. | >= 0.01 in. | >= 0.10 in. | >= 0.50 in. | >= 1.00 in. | Mean | High | Year | |
| | in. | in. | - | in. | - | in. | dd/yyyy or yyyyymmdd | # Days | # Days | # Days | # Days | in. | in. | - |
| January | 2.73 | 13.29 | 1959 | 0.00 | 1953 | 5.45 | 18/1959 | 6 | 4 | 1 | 1 | 0.0 | 0.0 | 1950 |
| February | 1.58 | 4.46 | 1951 | 0.00 | 1978 | 1.88 | 26/1972 | 6 | 3 | 1 | 0 | 0.0 | 0.6 | 1955 |
| March | 1.80 | 7.80 | 1951 | 0.00 | 1970 | 3.71 | 14/1951 | 8 | 4 | 1 | 0 | 0.0 | 0.0 | 1950 |
| April | 2.15 | 10.71 | 1963 | 0.39 | 1970 | 3.67 | 13/1963 | 10 | 5 | 1 | 0 | 0.0 | 0.0 | 1950 |
| May | 2.45 | 4.59 | 1953 | 0.67 | 1957 | 2.00 | 02/1966 | 13 | 6 | 1 | 0 | 0.0 | 0.0 | 1950 |
| June | 1.89 | 4.31 | 1951 | 0.44 | 1970 | 1.83 | 13/1969 | 12 | 5 | 1 | 0 | 0.0 | 0.0 | 1950 |
| July | 2.45 | 4.90 | 1954 | 0.43 | 1960 | 1.71 | 15/1954 | 11 | 6 | 2 | 0 | 0.0 | 0.0 | 1950 |
| August | 2.04 | 5.03 | 1965 | 0.28 | 1973 | 1.65 | 15/1950 | 11 | 5 | 1 | 0 | 0.0 | 0.0 | 1950 |
| September | 2.02 | 8.84 | 1974 | 0.09 | 1977 | 1.89 | 05/1972 | 9 | 4 | 1 | 0 | 0.0 | 0.0 | 1950 |
| October | 1.65 | 4.56 | 1966 | 0.00 | 1976 | 3.20 | 24/1958 | 7 | 3 | 1 | 0 | 0.0 | 0.0 | 1949 |
| November | 1.69 | 9.01 | 1950 | 0.09 | 1972 | 6.49 | 17/1950 | 6 | 3 | 1 | 0 | 0.0 | 0.0 | 1949 |
| December | 1.54 | 5.91 | 1968 | 0.05 | 1977 | 2.50 | 28/1953 | 6 | 3 | 1 | 0 | 0.0 | 0.0 | 1949 |
| Annual | 24.00 | 35.57 | 1974 | 12.49 | 1973 | 6.49 | 19501117 | 106 | 50 | 13 | 5 | 0.0 | 0.6 | 1955 |
| Winter | 5.86 | 17.05 | 1959 | 0.13 | 1978 | 5.45 | 19590118 | 18 | 10 | 3 | 1 | 0.0 | 0.6 | 1955 |
| Spring | 6.41 | 16.88 | 1963 | 2.38 | 1957 | 3.71 | 19510314 | 30 | 15 | 3 | 1 | 0.0 | 0.0 | 1950 |

Calculations of Emissions for Diesel Engines up to 600 HP

| | | | |
|-------------------|---|-----------------|-------------------|
| Client: | ISEMOTO CONTRACTING CO. LTD | | |
| Facility: | 350 TPH MOBILE CRUSHING PLANT | | |
| Equipment: | 275 HP GATERPILLAR DIESEL ENGINE | | |
| Date: | 4/4/2013 | PERMIT # | 0702-01-CT |

FUEL CALCULATIONS:

| | | | |
|---------------|------------|------------------------|--------------------|
| Fuel gal/hr | Hours/year | Diesel Fuel (gal/yr) | SCC 2-02-001-02 |
| 14.7 | 2080 | 30576 | SCC 2-03-001-01 |
| Fuel (gal/yr) | lb/gal | Diesel Fuel (lb/yr) | |
| 30576 | 7.1 | 217089.6 | |
| Fuel (lb/yr) | btu/lb | Diesel Fuel (mmbtu/yr) | mmbtu/hr: 2.014341 |
| 217089.6 | 19300 | 4189.82928 | |

Emission factors are based on AP42,3.3 dated 10/96

| Pollutant: | Em. Factor (lb/mmbtu) | Total (mmbtu/year) | Total (lbs/hr) | Total (tpy) |
|------------------|--------------------------|-----------------------|-------------------|----------------|
| Table 3.3-1&2 | | | | |
| NOx | 4.41E+00 | 4189.82928 | 8.883 | 9.239 |
| CO | 9.50E-01 | 4189.82928 | 1.914 | 1.990 |
| SOx | Sulfur Balance | | 0.031 | 0.033 |
| PM10 | 3.10E-01 | 4189.82928 | 0.624 | 0.649 |
| CO2 | 1.64E+02 | 4189.82928 | 330.352 | 343.566 |
| Aldehydes | 7.00E-02 | 4189.82928 | 0.141 | 0.147 |
| TOC ^a | 3.60E-01 | 4189.82928 | 0.725 | 0.754 |
| Benzene* | 9.33E-04 | 4189.82928 | 1.88E-03 | 1.95E-03 |
| Toluene* | 4.09E-04 | 4189.82928 | 8.24E-04 | 8.57E-04 |
| Xylenes* | 2.85E-04 | 4189.82928 | 5.74E-04 | 5.97E-04 |
| Propylene | 2.58E-03 | 4189.82928 | 5.20E-03 | 5.40E-03 |
| 1,3 Butadiene* | 3.91E-05 | 4189.82928 | 7.88E-05 | 8.19E-05 |
| Formaldehyde* | 1.18E-03 | 4189.82928 | 2.38E-03 | 2.47E-03 |
| Acetaldehyde* | 7.67E-04 | 4189.82928 | 1.54E-03 | 1.61E-03 |
| Acrolein* | 9.25E-05 | 4189.82928 | 1.86E-04 | 1.94E-04 |
| Naphthalene* | 8.48E-05 | 4189.82928 | 1.71E-04 | 1.78E-04 |
| TOTAL HAP's* | | | 1.28E-02 | 1.33E-02 |
| Total PAH | 1.68E-04 | 4189.82928 | 3.38E-04 | 3.52E-04 |

^aTotal TOC, includes Exhaust, Evaporative, Crankcase & Refueling

* Hazardous air pollutants listed in the Clean Air Act.

Calculation of NH3, PM, PM10, and PM2.5 according to WebFIRE (EPA, SCC codes 2-02-001-02 & 2-03-001-1):

| | | | | |
|--|----------|-------|---------|----------|
| NH3 | 2.90E+00 | 30576 | 0.04263 | 0.044335 |
| Emission Factor for all three pollutants & both SCC codes is: 4.25E+1 lb/1000gal | | | | |
| PM/PM10/PM2.5 | 4.25E+01 | 30576 | 0.625 | 0.650 |
| Emissions in grams/second: | | | | |
| | | | | 1.1193 |
| | | | | 0.2411 |
| | | | | 0.0061 |
| | | | | 0.0787 |

SO2 EMISSION CALCULATIONS BASED ON SULFUR BALANCE

CLIENT: ISEMOTO CONTRACTING CO LTD
PLANT: 350 TPH MOBILE CRUSHING PLANT
SOURCE: 275 HP CATERPILLAR DIESEL ENGINE

DATE: 4/4/2013 JOB # 1304178

Where:

S + O2 -> SO2

MW of S 32

MW of O2 32

MW of SO2 64

Max. Sulfur Content in Fuel (S1) 0.015%

Max. Fuel Consumption (MF) 14.7

Max. Hours / Year (MH) 2080

Density of Diesel Fuel (WD) 7.1 lb/gal

SO2 Emissions in lb/hr:

$$[S1 (\%) \times MF (\text{gal/hr}) \times WD (\text{lb/gal})] \times 2 = \text{SO2 (lb/hr)} \quad \boxed{0.0313} \text{ lb/hr}$$

SO2 Emissions in tons/year:

$$\text{SO2 (lb/hr)} \times \text{MH (hrs/yr)} / 2000 (\text{lb/ton}) = \text{SO2 (TPY)} \quad \boxed{0.033} \text{ TPY}$$

SO2 Emissions in grams / second:

$$\text{SO2 (lb/hr)} \times 453.6 \text{ g/lb} / 3600 \text{ sec/hr} = \text{SO2 (g/sec)} \quad \boxed{0.0039} \text{ g/sec}$$

APPENDIX C

EQUIPMENT INFORMATION & DATA

Equipment Information and Data are on file with the
Department of Health,
Clean Air Branch,
Honolulu, HI
Under Permit No. 0702-01-CT

0702 CS

Cat[®] C9 for Lightweight Heavy Duty Performance

ACERT™ Technology for 2007



CATERPILLAR[®]

285-425 Horsepower

Reliability

Dealer Repair Frequency statistics show Caterpillar® heavy duty engines offer outstanding reliability based on initial quality and customer surveys.

Durability

The Cat® C9 engine is expected to have a B50 life of 750,000 miles with Cat's recommended maintenance.

Fuel Economy

2007 Cat C9 engines are expected to provide up to a 4% improvement in fuel economy over EPA 2004 compliant engines.

Total Owning/Operating Costs

2007 compliant Cat engines are engineered to offer the same reliability and durability, better fuel economy, and similar maintenance costs as EPA 2004 compliant engines for outstanding overall value.

Dealer Support

Cat sets the industry standard for support with 2,500 authorized North American service locations and a 24/7 call center.



Cylinders: In-line 6

Bore/Stroke: 4.53 x 5.87 (115 mm x 149 mm)

Displacement: 9.3 L (567 cu in)

Weight: 1650 lb (748 kg)

Truck and Bus Ratings: 285-350 hp @ 2200 rpm

Fire Truck Ratings: 365-425 hp @ 2200/2300 rpm

RV Ratings: 400-425 hp @ 2300 rpm

Torque: 890-1350 lb-ft @ 1400 rpm

Count on the Cat® C9

Expanded horsepower ratings, increased torque ratio options and a new integral brake make the Cat® C9 the engine of choice for heavy duty performance in a lightweight package. A new Cat Common Rail Fuel System also optimizes on-highway performance with injection flexibility to meet 2007 emissions standards—as it increases fuel economy by up to 4%.

ADEM™ A4 enhanced electronics — Three times the memory, five times the processing speed of ADEM 2000 technology

Cat Common Rail Fuel System — Engineered and built by Caterpillar for reliability and durability

Mid-Supported Wet Liner Design — Able to be overhauled for longer lasting performance

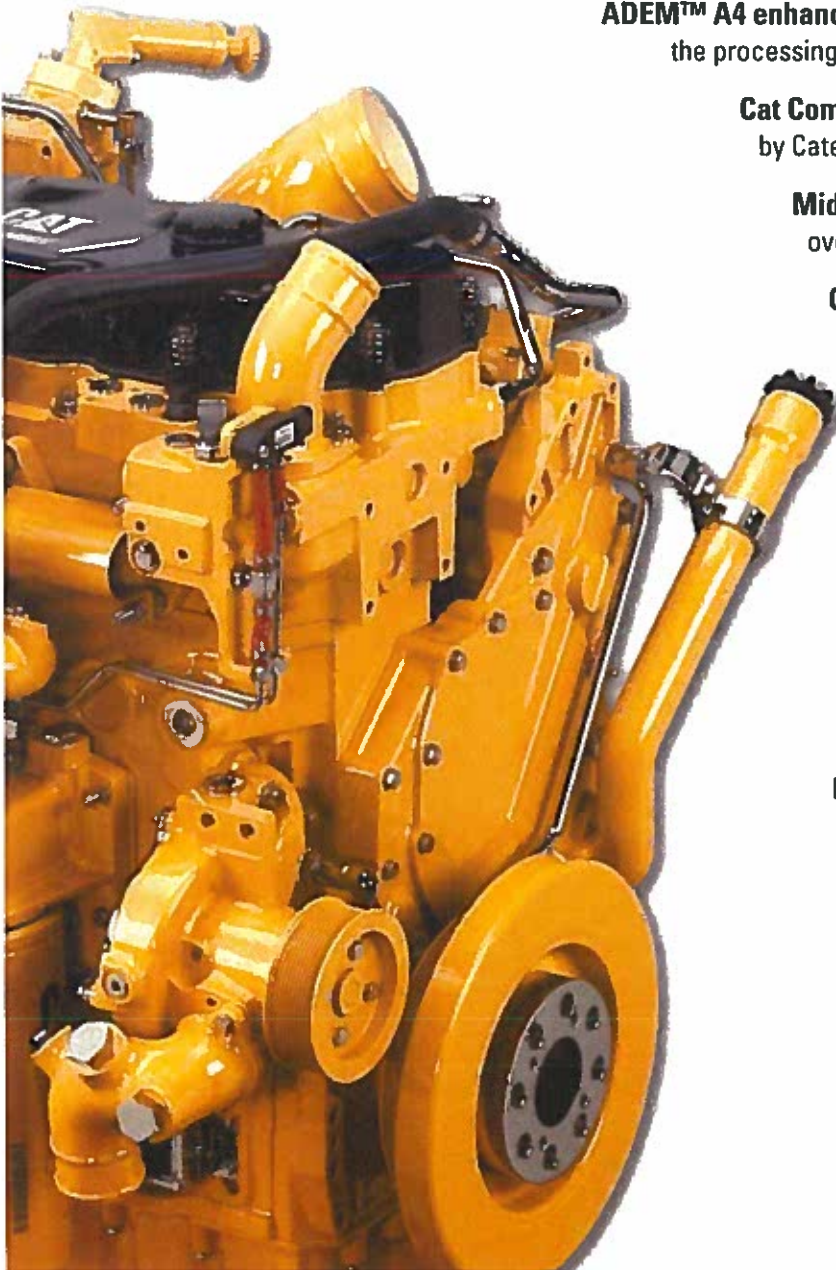
Cat Compression Brake — Provides braking up to 375 hp—outstanding stopping power for a 9-liter engine

Front and Rear PTO Options — The perfect fit for a variety of applications including construction and utility; pickup and delivery; fire and emergency vehicles; and RVs

“Leak-free” technology — Significantly reduces leaks to cut downtime and improve reliability

Variable Nozzle Turbocharger — Provides enhanced response and performance

Increased Displacement — Provides increased horsepower and torque capability



for Heavy Duty Performance

How do Cat® engines with ACERT™ Technology meet tougher 2007 emissions standards while maintaining top performance and excellent fuel economy? With refinements to the same innovative approach proven successful over millions of miles: using more cool, clean air for more efficient combustion.

Still a Systems Solution

The systems solution of ACERT Technology, a proven success, hasn't changed for 2007. Its four basic systems of *Air Management*, *Precision Combustion*, *Advanced Electronics* and *Effective Aftertreatment* are still the building blocks for reduced emissions, powerful performance and outstanding fuel economy.

Precision Combustion

Cat Designed Injection Technology
Clean Gas Induction

Air Management

Variable Nozzle
Turbocharger



Advanced Electronics

Electronic Control Module
System Integration

Effective Aftertreatment

Diesel Particulate Filter
Cat Regeneration System

But 2007 emissions regulations require diesels to emit lower levels of oxides of nitrogen (NOx) and particulates. That's why Cat has added two new enhancements: Clean Gas Induction and a Cat Diesel Particulate Filter featuring its own Cat Regeneration System (CRS).

New Clean Gas Induction

Clean Gas Induction (CGI) is a proprietary ACERT Technology process that draws off a small amount of non-combustible gas after it has passed through the engine's aftertreatment system. The gas is then cooled, blended with more incoming cool, clean air and returned to the combustion chamber. Since it has passed through the diesel particulate filter, most contaminants have been removed before the gas re-enters the intake system.

The CGI process through the DPF



The CGI process filters and cools exhaust before re-routing it to the engine.

The CGI advantage is clear. It recycles cool, clean air, which is key to good fuel economy, reliability and durability.

New Diesel Particulate Filter

For 2007, all engines require a diesel particulate filter (DPF) to further reduce emissions of hydrocarbons and other contaminants. But the Cat manufactured DPF is designed for self-regeneration under all conditions. When the electronic control module detects soot buildup, the Cat Regeneration System (CRS) activates. CRS works automatically, using only the precise amount of fuel necessary to oxidize soot. With CRS, no driver action is required for regeneration. Ash that collects in the Cat DPF can be cleared with a special removal tool.

in a Lightweight Package.

Horsepower Ratings for Every Application

Cat C9 2007 Compliant EPA Ratings

| Advertised Horsepower | Maximum Horsepower | Peak Torque lb-ft | Governed Speed RPM |
|-----------------------|--------------------|-------------------|--------------------|
| 285 MTB | 285 | 890 | 2200 |
| 335 MTB | 350 | 1150 | 2200 |
| 335 | 350 | 1150 | 2200 |
| 350 | 365 | 1250 | 2200 |
| 365 FT | 365 | 1250 | 2200 |
| 400 FT | 400 | 1250 | 2300 |
| 400 RV | 400 | 1250 | 2300 |
| 425 FT | 425 | 1250 | 2300 |
| 425 RV | 425 | 1250 | 2300 |
| 425 RV | 425 | 1350 | 2300 |

MTB – Mass Transit Bus
FT – Fire Truck
RV – Recreational Vehicle

Gearing Considerations

The C9 engine offers a wide operating range and high torque rise for compatibility with a wide range of transmissions. For best performance, trucks should be geared to achieve the appropriate balance between startability and desired road speed, and drivers should follow "Gear Fast, Run Slow" techniques.

For the **best balance of performance and economy**, spec axle ratios and tire sizes according to the following:

| 60,000 lb GCW or less |
|--|
| 1150 lb-ft: 1650 rpm @ 65 mph (105 km/h) |
| 1250 lb-ft and above: 1600 rpm @ 65 mph (105 km/h) |

To optimize your truck's performance characteristics, the minimum startability requirements are 10% for pickup and delivery, 14% for line haul, 20% for on/off-highway and 25% for off-highway.

At peak torque rpm in top gear, the recommended gradeability is 1.8% (1.5% minimum). At cruise speed in top gear, 1.0% is the ideal gradeability.

A computerized spec'ing tool called Design Pro 2.0, offered by your Caterpillar® dealer or authorized truck dealer, calculates the effects that various driveline components such as transmissions, axles and tires have on engine operation. This analysis allows you to test various driveline specifications to find the one best suited for your application and fuel economy requirements.

Genuine Network. Genuine Value.



24-Hour Coast-to-Coast Support

Count on the Cat® dealer and truck dealer network of more than 2,500 authorized locations for convenient access to genuine Cat parts and service across North America. Our industry-leading support even includes the Caterpillar On-Highway Engine Call Center, where technicians are available 24 hours a day, seven days a week to answer technical questions, direct you to a dealer or help arrange on-the-road assistance. Just dial 1-800-447-4986 or send an email to Call_CAT@cat.com.

Peace of Mind Mile After Mile

The standard warranty* for Cat C9 on-highway engines is 24 months.

Extended Service Coverage (ESC)* is an optional repair cost protection plan for owners of all on-highway trucks powered by Cat truck engines including engines with ACERT Technology. The coverage pays 100% of parts and labor charges for any covered failures caused by defects in materials or workmanship under normal use and service.

**See your dealer for full details and conditions.*

Delivering Excellence

Caterpillar has earned the J.D. Power and Associates award for "Highest in Customer Satisfaction with Vocational Heavy Duty Diesel Engines" six times. No other engine manufacturer has ever received this satisfaction award — not even once.

Caterpillar C-12 received the highest numerical score in the proprietary J.D. Power and Associates 2000-2003, 2005-2006 Heavy Duty Truck Engine/Transmission Customer Satisfaction Study.^{1,2} 2006 study based on 2,529 total telephone interviews measuring opinions of principal maintainers (owner/operators and fleet managers) of Class 8 heavy duty trucks. Proprietary study results are based on experiences and perceptions of principal maintainers surveyed in April-June 2006. Your experiences may vary. Visit jdpower.com



702-01

SEP 22 2008

ISEMOTO CONTRACTING CO., LTD.
74-5039B QUEEN KAAHUMANU HWY.
KAILUA-KONA, HI 96740



LETTER OF TRANSMITTAL

TO: State Of Hawaii
Department Of Health
Clean Air Branch
P.O. Box 3378
Honolulu, HI 96801

Date: 9/19/08
Job Name:

ICC Job No:

WE ARE SENDING YOU ATTACHED UNDER SEPARATE COVER VIA _____

- | | | |
|---|--|---|
| <input type="checkbox"/> CONTRACT | <input type="checkbox"/> PAYMENT REQUEST | <input type="checkbox"/> SUBMITTALS |
| <input type="checkbox"/> CHANGE ORDER | <input type="checkbox"/> CERTIFIED PAYROLL | <input type="checkbox"/> SHOP DRAWINGS |
| <input type="checkbox"/> QUOTATION | <input type="checkbox"/> PROPOSAL | <input type="checkbox"/> SAMPLES |
| <input type="checkbox"/> PURCHASE ORDER | <input type="checkbox"/> COPY OF LETTER | <input type="checkbox"/> PLANS |
| <input type="checkbox"/> WORK ORDER | <input type="checkbox"/> PHOTOGRAPHS | <input type="checkbox"/> SPECIFICATIONS |
| <input checked="" type="checkbox"/> OTHER _____ | | |

| COPIES | DATE | NO. | DESCRIPTION |
|--------|------|-----|--|
| 1 | | | Application for Temporary Covered Source Permit (Crusher Plant "F") |
| 1 | | | Payment Fee |

THESE ARE TRANSMITTED AS CHECKED BELOW

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> FOR APPROVAL | <input type="checkbox"/> APPROVED AS SUBMITTED | <input type="checkbox"/> FOR YOUR INFORMATION |
| <input type="checkbox"/> FOR YOUR USE | <input type="checkbox"/> APPROVED AS NOTED | <input type="checkbox"/> REQUEST FOR _____ |
| <input type="checkbox"/> AS REQUESTED | <input type="checkbox"/> RETURNED FOR CORRECTIONS | <input type="checkbox"/> SUBMIT _____ COPIES FOR DISTRIBUTION |
| <input type="checkbox"/> FOR REVIEW AND COMMENT | <input type="checkbox"/> RESUBMIT _____ COPIES FOR APPROVAL | <input type="checkbox"/> RETURN _____ CORRECTED PRINTS |
| <input type="checkbox"/> FOR BIDS DUE ON _____ | <input type="checkbox"/> RETURNING _____ SETS OF PRINTS | <input type="checkbox"/> OTHER FOR SIGNATURE |

REMARKS:

COPIES TO: File

SIGNED: Denise Pila
for Jerry Y. Egami
Senior Vice President

PHONE: (808) 329-8051

FAX: (808) 329-3261

MD 7055