

ADMINISTRATIVE RECORD

Pacific Concrete Cutting & Coring, Inc.

Application Nos. 0872-02 and 0872-03
for Minor Modification and Renewal

Crushing and Screening Plant

Located At: Various Temporary Sites, State of Hawaii

Temporary CSP No. 0872-01-CT

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Public Notice

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

(Docket No. 26-CA-PA-04)

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 PERMITS** presently under review for:

- 1) **Temporary Covered Source Permit (CSP) No. 0872-01-CT**
Application Nos. 0872-02 for Minor Modification and 0872-03 for Renewal
Pacific Concrete Cutting & Coring, Inc. (PCCC)
Crushing and Screening Plant
Located At: Various Temporary Sites, State of Hawaii
Initial Location: Ehiku Street, Lihue, Kauai
UTM: 4Q; 461,430 m E, 2,431,121 m N, (NAD-83)
- 2) **Temporary CSP No. 0907-01-CT**
Application No. 0907-01 for Initial Permit
Pacific Concrete Cutting & Coring, Inc.
Crushing Plant with a Diesel Engine
Located At: Various Temporary Sites, State of Hawaii
Initial Location: PCCC Baseyard, Ehiku Street, Lihue, Island of Kauai
Location 1 UTM: 4Q; 461,375 m E, 2,431,075 m N, (NAD-83)
Location 2 UTM: 4Q; 461,406 m E, 2,431,095 m N, (NAD-83)

The **DRAFT PERMITS** are described as follows:

- 1) **Temporary CSP No. 0872-01-CT**

The issuance of Temporary CSP No. 0872-01-CT will grant conditional approval for the continued operation of a 353 tons per hour (TPH) Powerscreen impact crusher, and a 441 TPH Powerscreen screener, and the addition of a 441 TPH Powerscreen screener. Water suppression will be used as necessary to minimize fugitive emissions from stone crushing and recycling operations. The impact crusher and screeners are subject to 40 Code of Federal Regulations (CFR), Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. This permit, if approved, would supersede Temporary CSP No. 0872-01-CT issued to PCCC on April 7, 2021.
- 2) **Temporary CSP No. 0907-01-CT**

The issuance of Temporary CSP No. 0907-01-CT will grant conditional approval for the operation of a portable 300 TPH Eagle impact crusher equipped with a

456 horsepower (hp) diesel engine. Water suppression will be used as necessary to minimize fugitive emissions from stone and concrete crushing and recycling operations. The crusher is subject to 40 CFR, Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. The diesel engine is subject to 40 CFR, Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and 40 CFR, Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The **ADMINISTRATIVE RECORDS**, consisting of the **APPLICATIONS** and non-confidential supporting material from the applicant, the permit review summaries, and the **DRAFT PERMITS**, are 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.:

Island of Oahu:

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

Island of Kauai:

Kauai District Health Office
Department of Health
3040 Umi Street, Lihue, Kauai

All comments on the draft permits and any request for a public hearing must be in writing, and must be postmarked or received by **June 11, 2026**, and may be:

- Emailed to doh.cabpubliccomments@doh.hawaii.gov; or
- Addressed to the Clean Air Branch at the above Oahu address.

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 Mr. Ukris Wongse-ont at the Clean Air Branch at (808) 586-4200.

Comments on the draft permit(s) 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

DRAFT

DATE

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

26-xxxE CAB
File No. 0872

Mr. Eli Brainerd
President
Pacific Concrete Cutting
& Coring, Inc.
P.O. Box 662261
Lihue, Hawaii 96766

Dear Mr. Brainerd:

SUBJECT: Temporary Covered Source Permit (CSP) No. 0872-01-CT
Application Nos. 0872-02 and 0872-03 for Minor Modification and Renewal
Pacific Concrete Cutting & Coring, Inc.
Crushing and Screening Plant
Located At: Various Temporary Sites, State of Hawaii
Initial Location: Ehiku Street, Lihue, Island of Kauai
UTM: Zone 4; 461,430 m E, 2,431,121 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 applications received on September 14, 2023, and March 24, 2025, and additional information on October 11, 2023, and October 25, 2023. This permit supersedes Temporary CSP No. 0872-01-CT issued on April 7, 2021, 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 II - INSIG: Special Conditions - Insignificant Activities
Attachment III: Annual Fee Requirements
Attachment IV: Annual Emissions Reporting Requirements

Mr. Eli Brainerd
DATE
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The following forms are enclosed for your use and submittal as required:

Compliance Certification Form
Change of Location Request for a Temporary Source
Annual Emissions Report Form: Crushing and Screening Plant
Monitoring Report Form: Opacity Exceedances

The following 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 Mr. Ukris Wongse-ont of the Clean Air Branch at (808) 586-4200.

Sincerely,

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

UW:tkg

Enclosures

**ATTACHMENT I: STANDARD CONDITIONS
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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)

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

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department 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 (Director) 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:

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

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

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

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

(Auth.: HAR §11-60.1-14, §11-60.1-90)

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

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

(Auth.: HAR §11-60.1-9, §11-60.1-90)

20. The Department 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)

23. The permittee shall allow the Director, 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)

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, HI 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. Environmental 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. 0872-01-CT**

Issuance Date: DATE

Expiration Date: DATE

In addition to the Standard Conditions of the temporary CSP, the following Special Conditions shall apply to the permitted facility:

Section A. Equipment Description

1. This permit encompasses the following equipment and associated appurtenances:

Crushing and Screening Plant

- a. 353 TPH Powerscreen impact crusher, Model Trakpactor 320, Serial No. PIDTP320AOMG52384, with water spray system, Manufactured in 2016 (Self-Propelled);
- b. 441 TPH Powerscreen screener, Model Chieftain 1400, Serial No. PID00066CDGKB1692, Manufactured in 2019 (Self-Propelled);
- c. 441 TPH Powerscreen screener, Model Chieftain 1400, Serial No. PID00066PDGLA3684, Manufactured in 2020 (Self-Propelled);
- d. Various conveyors; and
- e. Water Sprays.

(Auth.: HAR §11-60.1-3)

2. An identification tag or name plate shall be displayed on the equipment listed above to show the manufacturer, model no., and serial no., 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 crusher, screeners, and conveyors are subject to the provisions of 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 Mineral Processing Plants.

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

2. The permittee shall comply with all applicable requirements of these standards, including all operational and emission limits, monitoring and recordkeeping, notification and reporting, testing, and change of location requirements. The major requirements of these standards are detailed in the special conditions of this permit.

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

Section C. Operational and Emissions Limitations

1. Fugitive Emission Limits

- a. The permittee shall not cause to be discharged into the atmosphere from the crusher, fugitive emissions which exhibit greater than twelve percent (12%) opacity.
- b. The permittee shall not cause to be discharged into the atmosphere from any transfer point on the belt conveyors, screening operations, or from any other affected facility, fugitive emissions which exhibit greater than seven percent (7%) opacity.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90, §11-60.1-161; 40 CFR §60.672)¹

2. Fugitive Emission Control

- a. 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.
- b. The permittee shall take measures to control and minimize fugitive dust (e.g., wetting dry material prior to screening, wet suppression, enclosures, dust screens, etc.) at all material transfer points, stockpiles, plant roads, and throughout the facility. The Department may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- c. The 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 system. The permittee shall investigate and correct the problem before resuming operations. The normal operating water pressure (psi) and/or flow rate (gal/min) for the water spray system shall be established during the performance test conducted pursuant to Attachment II, Special Conditions, Section F, and may be incorporated into the permit.
- e. The water spray system shall be properly maintained and kept in good operating condition at all times with scheduled inspections and maintenance as needed to ensure compliance with the fugitive emission limits.
- f. Water spray system and/or a water truck shall be maintained and utilized, as necessary, to minimize fugitive dust from plant operations (e.g., haul roads, stockpiles, material transfer points, etc.).

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

3. Maintenance

The crushing plant, screening plants, and water spray system, 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)

4. Change of Locations

- 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, Special Conditions, 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, §11-60.1-81, §11-60.1-91)

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, §11-60.1-11, §11-60.1-90)

2. Production

The permittee shall maintain records on the total tons of material processed by the Crushing and Screening 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 - Crusher

- 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 systems. Inspections of the water spray systems shall be recorded in accordance with the Inspection, Maintenance, and Repair Log of Attachment II, Special Condition No. D.4.
- c. The permittee shall initiate corrective action within twenty-four (24) hours and complete corrective action as expediently as practical if the permittee finds that water is not flowing properly during an inspection of the water spray system.
- d. If equipment that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (e.g., water from recent rainfall), the logbook entry must specify the control mechanism being used instead of the water sprays.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90; 40 CFR §60.674)

4. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for the equipment covered under this permit. Inspection and replacement of parts and repairs to the crusher, screeners, conveyors, and water spray system shall be well documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/maintenance/repair work;
- b. A description of the part(s) inspected or repaired;
- c. A description of the findings and any maintenance or repair work performed; and
- d. The name and title of the personnel performing the inspection/work.

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

5. Performance Test

Performance tests shall be conducted on the Crushing and Screening Plant pursuant to Attachment II, Special Conditions, 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

Except in those months when performance tests are conducted for fugitive emissions pursuant to Attachment II, Special Conditions, Section F, the permittee shall conduct **monthly** (calendar month), VE observations for the Crushing and Screening 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 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 *Visible Emissions Form Requirements*. For the VE observations of fugitive emissions, the observer shall comply with the following additional requirements:

- a. 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);
- b. 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, Section 2.1) shall be followed; and
- c. The observer shall record the operating capacity (ton/hr) of the crushing and screening plants at the time the observations were made.

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 a crusher, screener, and transfer point, 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, §11-60.1-5, §11-60.1-11, §11-60.1-32, §11-60.1-90)

Section E. Notification and Reporting Requirements

1. Standard Conditions Reporting

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 14, 16, 17, and 24, respectively:

- a. Anticipated date of initial start-up, actual date of construction commencement, and actual date of start-up for the 441 TPH Powerscreen screener (Serial No. PID00066PDGLA3684);
- 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; SIP §11-60-10, §11-60-16)²

2. Deviations

The permittee shall report in writing **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional source testing, 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. The report is due **within sixty (60) days** following the end of each calendar year. The following enclosed form shall be used for reporting:

Annual Emissions Report Form: Crushing and Screening Plant

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

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §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 shall be signed and dated by a responsible official. The following enclosed form shall be used for reporting:

Monitoring Report Form: Opacity Exceedances

(Auth.: HAR §11-60.1-3, §11-60.1-11, §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 Conditions, Section F, the permittee shall notify and submit a written 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, §11-60.1-11, §11-60.1-90; 40 CFR §60.8)¹

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)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
- 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. Initial and Annual Performance Testing

- a. Within **sixty (60) days** after achieving the maximum production rate at which the 441 TPH Powerscreen screener (Serial No. PID00066PDGLA3684) will be operated, but not later than **180 days** after initial start-up, and **annually** thereafter, the permittee shall conduct or cause to be conducted performance tests on the screener 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.1.

- b. The permittee shall conduct or cause to be conducted an **annual** performance test on the 353 TPH Powerscreen impact crusher and 441 TPH Powerscreen screener (Serial No. PID00066CDGKB1692) to determine the opacity of emissions. Test shall be conducted for each point subject to an opacity limit specified in Attachment II, Special Condition No. C.1.
- c. The tests shall be conducted at the maximum expected operating capacity of the crusher and screeners.
- d. 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; SIP §11-60-15)^{1,2}

2. Performance Test Methods

- a. The 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 emissions 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. The required observer position relative to the sun (Method 9, Section 2.1) shall be followed;
 - iii. The observer shall record the operating capacity (tons/hr) of the crushing and screening plants at the time the observations were made; and
 - 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 the fugitive emissions standard of Attachment II, Special Condition No. C.1, the duration of Method 9 observations must be thirty (30) minutes (five (5) six-minute (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-minute (6-minute) averages.
- c. When determining compliance with the fugitive emissions standard of Attachment II, Special Condition No. C.1, if emissions from two (2) or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
 - i. Use for the combined emission stream, the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream; or
 - ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.

- d. When determining compliance with the fugitive emissions standard of Attachment II, Special Condition No. C.1, a single VE observer may conduct VE observations for up to three (3) fugitive, stack, or vent emission points within a fifteen-second (15-second) interval if the following conditions are met:
 - i. No more than three (3) emission points may be read concurrently;
 - ii. All three (3) emission points must be within a seventy (70) degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three (3) points; and
 - iii. If an opacity reading for any one (1) of the three (3) emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two (2) points and continue reading just that single point.
- e. If, after **thirty (30) days** notice for an initially scheduled performance test, there is a delay, for example, due to operational problems, in conducting any rescheduled performance test required by Attachment II, Special Conditions, 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 §60.8, §60.675)¹

3. Performance Test Expense and Monitoring

The performance tests shall be made at the expense of the permittee and 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 (30) 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 operation, locations of VE readings, and other parameters that may affect the test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.

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

5. Deviations

Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department 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 performance test, the permittee shall submit to the Department and 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 the permit emission limits, other pertinent support calculations, and field/laboratory data. The results shall be recorded and reported in accordance with 40 CFR Part 60, Appendix A, and §60.8.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §60.8, §60.675; SIP §11-60-15)^{1,2}

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

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section G. Change of Location Requirements

1. 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.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

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.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

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**.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

4. The permittee shall submit any additional information as requested by the Department.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

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.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

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.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

7. At each of the authorized locations, the permittee shall operate in accordance with this temporary CSP and all applicable requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-91)

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. 28.

(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 II – INSIG
SPECIAL CONDITIONS – INSIGNIFICANT ACTIVITIES
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-CT**

Issuance Date: DATE

Expiration Date: DATE

In addition to the standard conditions of the temporary CSP, the following special conditions shall apply to the permitted facility:

Section A. Equipment Description

This attachment encompasses insignificant activities listed in HAR §11-60.1-82(f) and (g) for which provisions of this permit and HAR, Subchapter 2, General Prohibitions apply.

(Auth.: HAR §11-60.1-3)

Section B. Operational Limitations

1. The permittee shall take measures to operate applicable insignificant activities in accordance with the provisions of HAR, Subchapter 2 for VE, fugitive dust, incineration, process industries, sulfur oxides from fuel combustion, storage of volatile organic compounds, volatile organic compound water separation, pump and compressor requirements, and waste gas disposal.

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

2. The Department may at any time require the permittee to further abate emissions if an inspection indicates poor or insufficient controls.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-82, §11-60.1-90)

Section C. Monitoring and Recordkeeping Requirements

1. The Department reserves the right to require monitoring, recordkeeping, or testing of any insignificant activity to determine compliance with the applicable requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. All records shall be maintained for at least five (5) years from the date of any required monitoring, recordkeeping, testing, or reporting. These records shall be true, accurate, and maintained in a permanent form suitable for inspection and made available to the Department or its authorized representative upon request.

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

Section D. Notification and Reporting

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:

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The compliance status;
3. Whether compliance was continuous or intermittent;
4. The methods used for determining the compliance status of the source currently and over the reporting period;
5. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act;
6. 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
7. 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.

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

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

Section E. Agency Notification

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

(Auth.: HAR §11-60.1-4, §11-60.1-90)

**ATTACHMENT III: ANNUAL FEE REQUIREMENTS
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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, HI 96782**

**ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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 and Screening 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, HI 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 confidential 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. 0872-01-CT
(CONTINUED, 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 of Health.

(Make Copies 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. 0872-01-CT
(CONTINUED, PAGE 2 OF ____)

Issuance Date: DATE

Expiration Date: DATE

(Make Copies for Future Use)

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	☐ Continuous ☐ Intermittent

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

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

COMPLIANCE CERTIFICATION FORM
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-CT
(CONTINUED, PAGE ____ OF ____)

Issuance Date: DATE

Expiration Date: DATE

(Make Copies for Future Use)

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, Special Condition No. B.1.a, 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.

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

COMPLIANCE CERTIFICATION FORM
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-CT
(CONTINUED, PAGE ____ OF ____)

Issuance Date: DATE

Expiration Date: DATE

(Make Copies for Future Use)

D. Deviations

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

*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.

**CHANGE OF LOCATION REQUEST
FOR A TEMPORARY SOURCE
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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. 0872-01-CT
(CONTINUED, PAGE 2 OF 3)**

Issuance Date: DATE

Expiration Date: DATE

(Make Copies for Future Use)

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

5. Current Location of Equipment: _____
6. **New Location Information**
 - a. Street Address: _____
 - b. City: _____ Zip Code: _____ Island: _____
 - c. For sites with no street address, provide:
 Description of location: _____
 Or, Tax map key: _____
 Or, UTM Coordinates: Zone: ____ Easting: _____ m E, Northing: _____ m N
 Horizontal Datum: _____
 - d. Plant Manager/Contact: _____ Phone Number: _____
 - e. Proposed start date at new location: _____
 - f. Estimate 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. 0872-01-CT
(CONTINUED, PAGE 3 OF 3)**

Issuance Date: DATE

Expiration Date: DATE

(Make Copies for Future Use)

- 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): _____

**ANNUAL EMISSIONS REPORT FORM
CRUSHING AND SCREENING PLANT
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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 Reporting 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. Report the air pollution control measures used for the facility:

Type of Operation	Air Pollution Control Measures in Use	Control Efficiency (% Reduction)
Truck Unloading		
Crushing		
Screening		
Conveyor Transfer		
Stockpiles		
Truck Loading		
Note: Control measures include water sprays, housing and duct work to baghouses. Use the following Control Efficiencies, unless documentation is available to show otherwise: Baghouses: 99% Water sprays, or Shroud: 70% Subsequent transfer points of water sprayed material: 70-(5*n)% Efficiency factors may be reduced by the Department of Health, if there are any indications that a source's air pollution control device is not operating at the specified efficiency.		

2. Report the total tons of material processed by the crusher and screeners for the calendar year:

Equipment	Serial No. (PIN)	Material Processed (tons/yr)
353 TPH Powerscreen crusher, Trakpactor 320	PIDTP320AOMG52384	
441 TPH Powerscreen screener, Chieftain 1400	PID00066CDGKB1692	
441 TPH Powerscreen screener, Chieftain 1400	PID00066PDGLA3684	

For Reporting Period: _____ Date: _____

Company Name: _____

Facility Name: _____

Equipment Location: _____

Responsible Official (Print): _____

Responsible Official (Signature):_____

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

[illegible]

**VISIBLE EMISSIONS FORM REQUIREMENTS
STATE OF HAWAII
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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. Environmental Protection Agency (EPA) approved equivalent methods, or alternative methods with prior written approval from the Department of Health 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 percent (5%) 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 (fifteen (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 of Health, or their representative upon request.

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

VISIBLE EMISSIONS FORM
TEMPORARY COVERED SOURCE PERMIT NO. 0872-01-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)

Stack **X**
 Sun 
 Wind 

Draw North Arrow

Site Conditions:

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

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

Emission color (black or white): _____

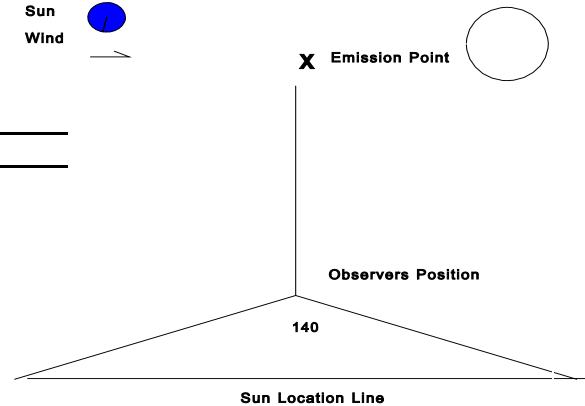
Sky conditions (% cloud cover): _____

Wind speed (mph): _____

Temperature (°F): _____

Observer Name: _____

Certified? (Yes/No): _____



Observation Date and Start Time: _____

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. 0872-01-CT
 Application Nos. 0872-02 and 0872-03 for Minor Modification and Renewal**

Company: Pacific Concrete Cutting & Coring, Inc.

Mailing Address: P.O. Box 662261
 Lihue, Hawaii 96766

Facility: Crushing and Screening Plant

Location: 1. Ehiku Street, Lihue, Island of Kauai
 UTM: 4Q; 461,430 m E, 2,431,121 m N (NAD-83)
 2. Various Temporary Sites, State of Hawaii

SIC Code: 1442 Construction Sand and Gravel

Responsible Official: Mr. Eli Brainerd
 President
 (808) 245-7171

Contact Official: Same as above

PROPOSED PROJECT

Pacific Concrete Cutting & Coring, Inc. (Permittee) submitted an application for a minor modification on September 14, 2023, and an application for renewal on March 24, 2025, for Temporary CSP No. 0872-01-CT. The existing permit, issued on April 7, 2021, includes a 353 TPH Powerscreen self-propelled impact crusher, a 441 TPH Powerscreen self-propelled screener, and conveyors. The Permittee is proposing to add another 441 tons per hour (TPH) Powerscreen self-propelled screener to the permit. Although the Permittee plans to utilize the additional screener as a backup, this review conservatively evaluates the potential emissions for all equipment operating independently with no hour limitations. In accordance with Hawaii Administrative Rules (HAR) §11-60.1-82(d)(4), the diesel engines (DEs) on the crusher and screeners are exempt because they propel the crusher and screeners. Moreover, the internal combustion engine equipped on an 800 TPH radial stacker (conveyor) is considered an insignificant activity pursuant to HAR §11-60.1-82(f)(2) because the heat input capacity is less than one million (MM) British Thermal Unit (BTU) per hour (hr).

The Permittee will be processing rocks and/or unpainted concrete suitable for crushing and recycling. Materials will be loaded onto the impact crushers by front-end loader or conveyor belt. The screeners may work in conjunction with the crusher or independently to separate the materials into different sizes. Water sprays will be utilized to control fugitive emissions from the impact crusher, screeners, conveyors, stone processing area, storage piles, and unpaved roads as needed.

As an overview, the Permittee currently has a total of five (5) permitted and proposed temporary CSPs at the subject location, which includes 0659-01-CT (permitted), 0673-01-CT (permitted), 0872-01-CT (permitted), 0907-01-CT (proposed), and 0925-01-CT (proposed). Although the Permittee proposed to operate the equipment at various temporary locations in the State of Hawaii, the initial location at the base yard on Ehiku Street has been assessed to ensure emissions are below major source levels. Based on the potential emissions in the table below, the Permittee's combined operation of the permitted/proposed crushers and DE at this location has the potential to emit less than 100 tons per year of any air pollutant subject to regulation and less than 10 tons per year for a single hazardous air pollutant (HAP). Therefore, this is not a major source.

Temporary CSP No.	Equipment	Emissions (TPY) ^{1,2}							
		CO	NO _x	SO ₂	VOC	HAPs	PM	PM ₁₀	PM _{2.5}
0659-01-CT	507 TPH Komatsu jaw crusher	-	-	-	-	-	9.30	3.51	0.52
0673-01-CT	250 TPH Hartl impact crusher	-	-	-	-	-	1.31	0.591	0.110
	165 TPH Rubble Master impact crusher	-	-	-	-	-	0.87	0.390	0.072
0872-01-CT	353 TPH Powerscreen Impact crusher	-	-	-	-	-	1.86	0.835	0.155
0907-01-CT	300 TPH Eagle impact crusher	-	-	-	-	-	1.58	0.710	0.131
	456 HP Caterpillar DE	14.4	1.64	0.02	4.6	0.09	0.08	0.079	0.074
0925-01-CT	308 TPH Powerscreen jaw crusher	-	-	-	-	-	1.62	0.728	0.135
Total Potential Location Emissions		14.4	1.64	0.02	4.6	0.09	16.6	6.8	1.2

¹Ton per year (TPY).

²Includes only point source emissions and emissions considered reasonably capturable.

BACKGROUND

Permit Issuance History

An initial temporary CSP was issued on April 7, 2021. Permitted equipment as shown on the April 7, 2021, permit:

- 353 TPH Powerscreen impact crusher, Model Trakpactor 320, Serial No. PIDTP320AOMG52384, with water spray system;
- 441 TPH Powerscreen screener, 2-deck, Model Chieftain 1400, Serial No. PID00066CDGKB1692;
- Various conveyors; and
- Water sprays.

Compliance Status

As of the date of this document, the facility does not have any outstanding violations.

EQUIPMENT DESCRIPTION

- Existing 353 TPH Powerscreen impact crusher, Model Trakpactor 320, Serial No. (PIN)* PIDTP320AOMG52384, with water spray system, Manufactured in 2016 (Self-Propelled) (Propelled by an exempt 257 kW Scania DE, Model No. DC09 085A, Serial No. 6936404);

2. Existing 441 TPH Powerscreen screener, 2-deck, Model Chieftain 1400, Serial No. (PIN)* PID00066CDGKB1692, Manufactured in 2019 (Self-Propelled)**, (Propelled by an exempt 82 kW Caterpillar DE, Model No. C4.4, Serial No. JKT14530);
3. Proposed 441 TPH Powerscreen screener, 2-deck, Model Chieftain 1400, Serial No. (PIN)* PID00066PDGLA3684, Manufactured in 2020, (Self-Propelled), (Propelled by an exempt 82 kW Caterpillar DE, Model No. C4.4, Serial No. JKT17542);
4. Various conveyors; and
5. Water sprays.

*Product Identification Number (PIN)

**The 441 TPH Powerscreen screener in Item No. 2 above, Serial No. (PIN) PID00066CDGKB1692 is also included in Temporary CSP No. 0925-01-CT.

AIR POLLUTION CONTROLS

The crusher is equipped with a built-in water spray system. The screeners and conveyors are not equipped with water spray systems and rely on carryover from the crusher's water sprays to wet the materials when operating together. Additional water sprays will be used, as needed, when the screeners are operating independently. Water sprays will also be used as needed to minimize fugitive dust from screening area, material transfer points, storage piles, and unpaved roads.

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

11-60.1-32, Visible Emissions

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

Prevention of Significant Deterioration (PSD), 40 Code of Federal Regulations (CFR) Part 52, §52.21

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 TPY, which is the trigger level for a non-listed source.

Standard of Performance for New Stationary Sources (NSPS), 40 CFR Part 60

Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants is applicable to the self-propelled crusher and screeners because they were manufactured after August 31, 1983, and the crusher has a maximum capacity greater than 150 TPH. The Powerscreen, Model Trakpactor 320, impact crusher was manufactured in 2016, and the two (2) Powerscreen, Model Chieftain 1400, screeners were manufactured in 2019 and 2020.

Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is not applicable to the DEs for the self-propelled crusher and screeners because the engines will operate as nonroad engines as defined in 40 CFR §1068.30. Subpart IIII applies to stationary CI ICE that are not nonroad engines.

National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61

This source is not regulated by 40 CFR Part 61 NESHAPs.

NESHAPs for Source Categories, 40 CFR Part 63

Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) is not applicable to the DEs for the self-propelled crusher and screeners because the DEs will operate as nonroad engines as defined in 40 CFR §1068.30. Subpart ZZZZ applies to stationary RICE that are not nonroad engines.

Compliance Assurance Monitoring (CAM), 40 CFR 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.

CAM is not applicable because potential emissions are below major source thresholds.

Air Emissions Reporting Requirements (AERR), 40 CFR Part 51, Subpart A

Except for the crusher and DEs, emissions from this facility are fugitive in nature, not capturable, and the operations do not belong to one of the categories of sources listed in the definition of “major source” or “major stationary source” where fugitive emissions shall be considered in the determination.

The DEs equipped on the crusher and screeners are considered as nonroad mobile source. Emissions from nonroad mobile sources are either reported using the latest mobile emissions models developed by the U.S. Environmental Protection Agency (EPA) or by the state accepting existing EPA emission estimates. For these reasons, emissions from the DEs are not included in the AERR determination.

AERR is not applicable because potentially capturable fugitive emissions from the crusher are below AERR thresholds for Type A and Type B sources as specified in 40 CFR Part 51, Subpart A, Appendix A, Table 1, and emissions from nonroad mobile sources are not included in the determination of a stationary source's AERR applicability.

Department of Health (DOH), Clean Air Branch (CAB), In-house Annual Emissions Reporting
The CAB requires annual emissions reporting from those noncovered source facilities that have facility wide emissions exceeding in-house reporting levels and for all covered sources. Annual emissions reporting is required because this facility is a covered source.

Best Available Control Technology (BACT)

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 the new screener are fugitive and are not considered capturable. Since this is not a listed source category, non-capturable fugitive emissions are not considered in the applicability determination. Although not subject to BACT, water sprays will be used to control fugitive emissions throughout the facility.

EXEMPT EQUIPMENT AND INSIGNIFICANT ACTIVITY

Exempt Equipment

The Permittee has three (3) DEs for the propelling of mobile sources that are exempt in accordance with HAR §11-60.1-82(d)(4) as follows:

1. 257 kW Scania DE, Model No. DC09 085A, Serial No. 6936406, Manufactured in 2016, (for the propelling of the 353 TPH Powerscreen impact crusher, Model Trakpactor 320, Serial No. (PIN) PIDTP320AOMG52384);
2. 82 kW Caterpillar DE, Model No. C4.4, Serial No. JKT14530, Manufactured in 2019, (for the propelling of the 441 TPH Powerscreen screener, Model Chieftain 1400, Serial No. (PIN) PID00066CDGKB1692); and
3. 82 kW Caterpillar DE, Model No. C4.4, Serial No. JKT17542, Manufactured in 2020, (for the propelling of the 441 TPH Powerscreen screener, Model Chieftain 1400, Serial No. (PIN) PID00066PDGLA3684).

Insignificant Activity

The Permittee has one (1) insignificant activity in accordance with HAR §11-60.1-82(f)(2) for fuel burning equipment with a heat input capacity less than 1 MMBtu/hr as follows:

73 hp Deutz DE, Model No. TD2011L04I, Serial No. 11953258 (manufactured in 2016), (equipped on the 800 TPH MGL Engineering portable radial stacker (conveyor), Model No. 7436, Serial No. 7436702).

Fuel consumption: $0.383 \text{ lbs/hp-hr} \div 7.05 \text{ lbs/gal} \times 77.2 \text{ hp} = 4.19 \text{ gal/hr}$

Heat Input: $4.19 \text{ gal/hr} \times 137,000 \text{ Btu/gal} \div 1,000,000 \text{ Btu/1MMBtu} = \underline{0.57 \text{ MMBtu/hr}}$

When emissions from insignificant activity and permitted equipment are combined, the total project emissions do not exceed major source levels.

ALTERNATIVE OPERATING SCENARIOS

None.

PROJECT EMISSIONS

Emissions are conservatively based on the crushing and screening plants operating at 8,760 hours per year (hrs/yr). The manufacturer's maximum processing capacity of 1,235 TPH for the crusher and screeners are used to calculate potential project particulate matter (PM) emissions. The crusher is equipped with water spray system. Additional water sprays will be used as needed to minimize fugitive dust from screening operations, material transfer points, storage piles, and unpaved roads.

Potential emissions are based on controlled emission factors (EFs) for the crusher and equipped conveyor, uncontrolled EFs for the screeners and equipped conveyors, and uncontrolled EFs for truck loading and truck unloading, taken from AP-42, Fifth Edition, Chapter 11, Section 11.19.2 – Crushed Stone Processing and Pulverized Mineral Processing (08/04). Truck loading and truck unloading are assumed to process 1,235 TPH of materials (the combined maximum capacity of the crusher and screeners), and conveyors are assumed to process according to the equipment capacities. Storage pile emissions are based on uncontrolled EFs from AP-42, Chapter 13 – Miscellaneous Sources (Chapter 13), Section 13.2.4 – Aggregate Handling and Storage Piles (11/06). Potential emissions for vehicle travel on unpaved roads are based on uncontrolled EFs from AP-42, Chapter 13, Section 13.2.2 – Unpaved Roads (11/06). A seventy percent (70%) control efficiency was applied for fugitive dust suppression from water spraying to control fugitive dust from screeners, screeners' conveyors, truck loading, truck unloading, storage piles, and unpaved roads as estimated in AP-42, Chapter 11, Section 11.19.1.2 – Emissions and Controls (11/95).

Self-Propelled Crushing and Screening Plants

Self-Propelled Crushing and Screening Plants			
Pollutant	353 TPH Crusher Emissions (TPY)	441 TPH Screener Emissions (TPY)	441 TPH Screener Emissions (TPY)
	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr
PM	1.86	67.6	67.6
PM ₁₀	0.83	17.3	17.3
PM _{2.5}	0.15	6.3	6.3

Truck Loading, Truck Unloading, Conveyors, Storage Pile, and Unpaved Road

Truck Loading, Truck Unloading, Conveyors, Storage Piles, and Unpaved Roads					
Pollutant	Truck Loading (TPY)	Truck Unloading (TPY)	Conveyors Transfer Points (10x) (TPY)	Unpaved Road Emissions (TPY)	Storage Piles Emissions (TPY)
	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr
PM	0.32	0.05	17.3	52.6	9.7
PM ₁₀	0.16	0.03	6.3	12.9	4.6
PM _{2.5}	0.05	0.01	2.6	1.3	0.7

HAPs Assessment

A HAPs assessment was not conducted for this review because the proposed crushing and screening plants emit only PM and are equipped with exempt DEs.

Project Emissions Summary

Project Emissions Summary^{1,2,3,4,5,6}				
Pollutant	Total Facility Emissions (TPY)	Reasonably Capturable Fugitive Emissions (TPY)	Non-Capturable Fugitive Emissions (TPY)	Insignificant Activity Emissions (TPY)
	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr	Unlimited 8,760 hrs/yr
CO	0	0	0	2.4
NO _x	0	0	0	11.1
SO ₂	0	0	0	0.004
PM	216.9	1.86	215.1	0.78
PM ₁₀	59.3	0.83	58.5	0.78
PM _{2.5}	25.1	0.15	24.9	0.78
VOC	0	0	0	0.88
HAPs	0	0	0	0.01

¹Total Facility Emissions include capturable and non-capturable fugitive emissions.

²Reasonably capturable fugitive emissions include emissions from the crusher.

³Non-capturable fugitive emissions include emissions from truck unloading, truck loading, screeners, conveyors, storage piles, and unpaved roads.

⁴Carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂), volatile organic compounds (VOC), and HAPs emissions are not emitted from the permitted crushing and screening activities.

⁵This facility is permitted to operate 8,760 hrs/yr.

⁶Emissions from insignificant activity are generated from the 73 hp Deutz DE equipped on the portable 800 TPH MGL Engineering portable radial stacker (conveyor) and are not included in the project emissions.

Synthetic Minor Source

A synthetic minor source means a source that otherwise has the potential to emit regulated New Source Review (NSR) pollutants in the amounts at or above the thresholds for major sources but has taken restrictions, so that its potential to emit is less than such amounts for major sources. Since this is not a listed source in the definition of "Major Source" in HAR §11-60.1-1, non-capturable fugitive emissions from screeners, truck loading, truck unloading, conveyors, storage piles, and unpaved roads are not included in the major source determination in accordance with the HAR §11-60.1-1. Only fugitive emissions from the crusher are considered capturable. Furthermore, the DEs are considered nonroad engines whose emissions are not included in major source determination.

This facility is not a synthetic minor source because the facility does not have the potential to emit point source and capturable emissions above the major source threshold if operated 8,760 hours per year. This facility is not a synthetic minor source because the facility does not have the potential to emit point source and capturable fugitive emissions above the major source threshold if operated 8,760 hours per year. See the Proposed Project section that demonstrates the operation of equipment from multiple permits on the same site does not have the potential to emit at or above major source levels.

AIR QUALITY ASSESSMENT

An ambient air quality assessment is not required for this facility. The crusher and screeners generate fugitive emissions which are not generally modeled by the Clean Air Branch.

SIGNIFICANT PERMIT CONDITIONS

1. Fugitive Emission Limits

- a. The permittee shall not cause to be discharged into the atmosphere from the crusher, fugitive emissions which exhibit greater than twelve percent (12%) opacity.
- b. The permittee shall not cause to be discharged into the atmosphere from any transfer point on the belt conveyors, screening operation, or from any other affected facility, fugitive emissions which exhibit greater than seven percent (7%) opacity.

Reason: The opacity and fugitive dust conditions are incorporated into the permit pursuant to 40 CFR Part 60, Subpart OOO, and HAR §11-60.1-33, respectively.

2. Location Change

- 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, Special Conditions, 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.

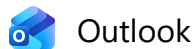
Reason: The one (1) location change during the term of the permit was incorporated into the permit pursuant to the “temporary covered source” definition specified under HAR §11-60.1-81.

CONCLUSION

Pacific Concrete Cutting & Coring, Inc., the Permittee, is requesting to add another 441 TPH Powerscreen self-propelled screener to the permit. The crusher and screeners can be operated together or independently with no hour limitations. Each crusher and screener is equipped with a DE propelling the unit that are exempt in accordance with the HAR §11-60.1-82(d)(4). The DE equipped on the radial stacker (conveyor) is considered as insignificant activity because the heat input capacity is less than one million BTU/hr according to HAR §11-60.1-82(f)(2). Issuance of a temporary CSP is recommended based on the review of the information provided by the Permittee and subject to the permit conditions. The draft/proposed permit is subject to a thirty (30) day public comment period and forty-five (45) day EPA review period.

Ukris Wongse-ont
February 13, 2026

Application and Supporting Information



[EXTERNAL] Crusher Permit Renewal Application

From Julie Simonton <julie@pccchawaii.com>

Date Mon 3/31/2025 10:44 AM

To Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

 1 attachment (2 MB)

clean air crusher permit.pdf;

Ukris-

Happy Monday!

The renewal application was mailed out early last week, however, I wanted to submit an email copy to you also. I am always afraid these things might get lost in the mail. I know you need the original and the check but at least you know we really did complete the application. 😊

Thanks, Ukris!

Julie Simonton, P.E.

Vice President

Pacific Concrete Cutting & Coring, Inc.

PO Box 662261

Lihue, HI 96766

Tel: 808-245-7171





[EXTERNAL] RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

From Julie Simonton <julie@pccchawaii.com>
Date Tue 3/26/2024 6:25 AM
To Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>
Cc Fred Peyer <fredpeyer@gmail.com>

Ukris-

How are you? Just following up on our application to add a new Powerscreen self-propelled screener to our permit. Do you need any other additional information from me?

Thank you,

Julie Simonton, P.E.
Vice President
Pacific Concrete Cutting & Coring, Inc.
PO Box 662261
Lihue, HI 96766
Tel: 808-245-7171

From: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>
Sent: Wednesday, October 25, 2023 10:08 AM
To: Julie Simonton <julie@pccchawaii.com>
Subject: RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Hi Julie,

Appreciate the additional information. Thank you, Julie!

Ukris

From: Julie Simonton <julie@pccchawaii.com>
Sent: Wednesday, October 25, 2023 9:59 AM
To: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>
Subject: [EXTERNAL] RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Ukris-

I apologize for the delay in responding- and you were on my list to email today.

Our mechanic went back to the screener yesterday and went through the engine. He couldn't find anything other than the attached picture.

I attached an email that we received from Powerscreen because Fred had the same questions when he was preparing our permit application...I apologize for not remembering this when you first asked the question. Will the attached information work?

Thank you,

Julie

From: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Sent: Wednesday, October 25, 2023 9:47 AM

To: Julie Simonton <julie@pccchawaii.com>

Subject: RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Aloha Julie,

Did your crews find any nameplate on the engine year for the proposed Powerscreen Chieftain 1400 screener (PIN: PID00066PDGLA3684)? The attached picture is the engine information on the existing Powerscreen Chieftain 1400 screener (PIN: PID00066CDGKB1692) you sent me in the past. Since these screeners are the same model, maybe the engine information can be found in the same area?

If not, do you have any documentation?

Thank you, Julie.

Ukris

From: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Sent: Monday, October 16, 2023 8:01 AM

To: Julie Simonton <julie@pccchawaii.com>

Subject: Re: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Okay, let me know. Thank you, Julie, for the update!

Have a nice day.

Ukris

From: Julie Simonton <julie@pccchawaii.com>

Sent: Monday, October 16, 2023 8:12 AM

To: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Subject: [EXTERNAL] RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Trying to track that down. Our guys in the yard have been working on another project- I keep reminding them to get me that picture. They have looked previously for that tag (for Fred Peyer) and I don't think they found an engine tag with year but I have asked them to try again.

From: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Sent: Monday, October 16, 2023 7:26 AM

To: Julie Simonton <julie@pccchawaii.com>

Subject: Re: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Good morning Julie,

May I follow-up on the engine nameplate for the new screener please? Particularly, the engine year built. Appreciated.

Thank you,
Ukris

From: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Sent: Thursday, October 12, 2023 7:38 AM

To: Julie Simonton <julie@pccchawaii.com>

Subject: RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Good morning Julie,

Thank you for sending the pictures and the location of the new Powerscreen Chieftain 1400. Is there any nameplate that shows the engine manufactured year?

Thank you, Julie!
Ukris

From: Julie Simonton <julie@pccchawaii.com>

Sent: Wednesday, October 11, 2023 3:42 PM

To: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Subject: [EXTERNAL] RE: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Ukris-

Please see attached pictures, as requested. There aren't any water sprays on the screener.

Let me know if you need anything else.

Thank you,

Julie Simonton, P.E.
Vice President
Pacific Concrete Cutting & Coring, Inc.
PO Box 662261
Lihue, HI 96766
Tel: 808-245-7171

From: Wongse-Ont, Ukris <ukris.wongse-ont@doh.hawaii.gov>

Sent: Tuesday, October 10, 2023 12:02 PM

To: Julie Simonton <julie@pccchawaii.com>

Subject: 0872-01-CT, Air Permit Modification to add a 441 TPH Powerscreen Self-Propelled Screener, Model Chieftain 1400.

Aloha Julie,

I am working on your air permit modification application. For now, may I request the following information please:

1. Legible map of the current location of the back-up Powerscreen Chieftain 1400 screener (serial no. PID00066PDGLA3684);
2. Legible pictures of the back-up Powerscreen Chieftain 1400 screener, screener's nameplate, diesel engine, and diesel engine nameplate; and
3. Whether there is any water spray system on the back-up screener.

I will try to see if the new screener can be permitted without the proposed back-up restriction, so both screeners can be operated at the same time and independently or in conjunction with the crusher.

Thank you,
Ukris

Ukris Wongse-ont
HI Dept. of Health
Clean Air Branch

2827 Waimano Home Road, Room 130,

Pearl City, HI 96782

[808.586.4200](tel:808.586.4200) | [808-586-4359](tel:808-586-4359)



SEP 14 2023

SCANNED

POSTMARK

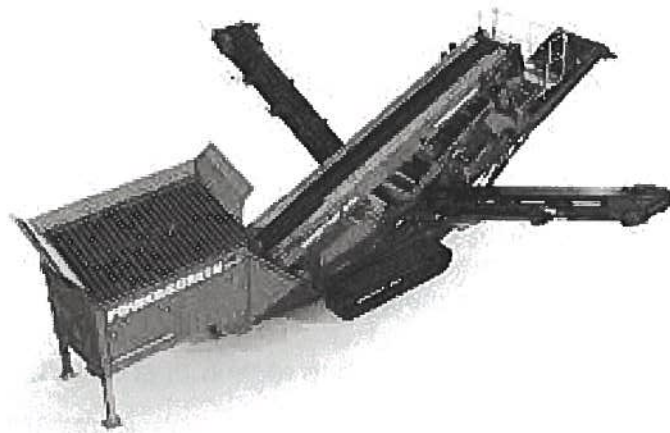
SEP 13 2023

Minor Modification to Permit No. 0872-01-CT

(HAR 11-60.1-103)

FACILITY NAME:

**Crushing and Screening Plants
located at
Various Temporary Sites, State of Hawaii**



Powerscreen Chieftain 1400

OWNER:

**PACIFIC CONCRETE CUTTING & CORING, INC. (PCCC)
P.O. Box 662261
Lihue, HI 96766**

September 11, 2023

PREPARED BY:

**CFM Environmental LLC
(808) 779-2948
Email: fredpeyer@gmail.com
Ref. # 2308030**

MO19526

INTRODUCTION

This application is for a minor modification for permit no. 0872-01-CT. Permit holder is PCCC, P.O. Box 662261, Lihue, HI 96766. This is a temporary permit with the equipment operating at various locations, State of Hawaii.

The following modification is requested:

Add the 441 TPH Powerscreen Chieftain 1400 self-propelled (on tracks) screener, serial number PID00066PDGLA3684 as a backup screener to replace the permitted Powerscreen Chieftain 1400 screener, serial number PID00066CDGKB1692 should that screener break down or taken off service for repair or maintenance. The existing permitted Chieftain 1400 screener and the backup Chieftain 1400 screener will never be operated concurrently under this permit and at the same location.

The replacement Chieftain 1400 is powered by a Caterpillar model C4.4 82 kW (109 HP) diesel engine serial number JKT17542. The diesel engine is propelling the unit and is therefore exempt pursuant to HAR 11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

All existing permit terms and conditions to remain unchanged.

Alternate operating scenario: The permittee may replace any diesel engine with a temporary replacement unit of the same or smaller size if any repair reasonably warrants the removal of the diesel engine from its site.

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Application for minor modification to temporary covered source permit no. 0872-01-CT, PCCC

STANDARD PERMIT APPLICATION FORM S-1

Forms C1 and C2

(HAR 11-60.1-103 (a))

File/Application No.: **0872-01-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: **PACIFIC CONCRETE CUTTING & CORING, INC.**
2. Facility Name (if different from the Company): **Crushing and Screening Plants**
3. Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**
Phone Number: **(808) 245-7171**
4. Name of Owner/Owner's Agent: **Eli Brainerd**
Title: **President** Phone: **(808) 245-7171**
Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**
5. Plant Site Manager/Other Contact: **Eli Brainerd**
Title: **President** Phone: **(808) 245-7171**
Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**
6. Permit Application Basis: (Check One.)

Initial Permit for a New Source Renewal of Existing Permit ☒ Temporary Source Modification: ==> Is Modification?	Initial Permit for an Existing Source General Permit Transfer of Permit Significant Minor Uncertain
---	--
7. If renewal or modification, include existing permit number: **0872-01-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: **1442**

11. Proposed Equipment/Plant Location Address: **Present Location on file with DOH CAB**
City: _____ State: **HI** Zip Code: _____

UTM Coordinates: **On file with DOH CAB**

12. General Nature of Business: **Mobile Crushing and Screening Plant**

13. Date of Planned Commencement of Construction or Modification: **upon approval**

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): **Brainerd** (First): **Eli** (MI): _____
Title: **President** Phone: **(808) 245-7171**

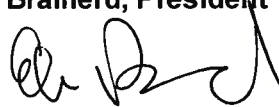
Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**

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): **Eli Brainerd, President**

(Signature): _____



Date: _____

9/11/23

File No.: 0872-01-CT

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 | • Initial Covered Source Permit Application |
| • Temporary Noncovered Source Permit Application | • Temporary Covered Source Permit Application |
| • General Noncovered Source Permit Application | • General Covered Source Permit Application |
| • Application for a Noncovered Source Permit Renewal | • Application for a Covered Source Permit Renewal & Modification |
| • Application for a Modification to a Noncovered Source | X Application for a Minor 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?

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

{If NO, complete items a-c below}

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

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
Subchapter 9, Hazardous Air Pollutant Sources
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

Provide a statement that the source is in compliance and will continue to comply with all such requirements.
PACIFIC CONCRETE CUTTING & CORING, INC states that the plants to be covered under this application are in compliance 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</u> <u>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</u> <u>Date</u>	<u>Currently in</u> <u>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</u> <u>Proposed Action/Steps</u> <u>to Achieve Compliance</u>	<u>Expected Date</u> <u>of Achieving</u> <u>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</u> <u>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: _____ Beginning Date: _____
(less than or equal to 6 months)

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): **Eli Brainerd, President**

(Signature): 

Date: 9/11/23

File No.: 0872-01-CT

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;
- Application for a Covered Source Permit Renewal & Modification
- X** Application for a Minor 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): **Eli Brainerd, President**

(Signature):



Date:

9/11/23

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: **upon issuance of permit**
2. Emissions Unit No./Description: **353 TPH Powerscreen Trakpactor 320 horizontal impact crusher, 441 TPH Powerscreen Chieftain 1400 2-deck screen, MGL Engineering 7436 radial stacker**
3. Identify the applicable requirement(s) that is/are the basis of this certification:

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
 Subchapter 9, Hazardous Air Pollutant Sources
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

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:

Annual Source Test
Sulfur in Fuel tested by Supplier
Daily Visual Observations
Monthly Visual Observation by Certified Reader

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

Application of Water Sprays

Record Keeping

Semi-Annual and Annual Emissions Report

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:	_____

HAR 11-60.103 (a) (1) Description of all changes

Add the 441 TPH Powerscreen Chieftain 1400 self-propelled (on tracks) screener, serial number PID00066PDGLA3684 as a backup screener to replace the permitted Powerscreen Chieftain 1400 screener, serial number PID00066CDGKB1692 should that screener break down or taken off service for repair or maintenance. The existing permitted Chieftain 1400 screener and the backup Chieftain 1400 screener will never be operated concurrently under this permit and at the same location.

The replacement Chieftain 1400 is powered by a Caterpillar model C4.4 82 kW (109 HP) diesel engine serial number JKT17542. The diesel engine is propelling the unit and is therefore exempt pursuant to HAR 11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

All existing permit terms and conditions to remain unchanged.

Alternate operating scenario: The permittee may replace any diesel engine with a temporary replacement unit of the same or smaller size if any repair reasonably warrants the removal of the diesel engine from its site.

Backup screener description:

Manufacturer	: Powerscreen
Year	: 2020
Model	: Chieftain 1400
Serial Number	: PID00066PDGLA3684
Max. Throughput	: 441 TPH

Propelled and powered by:

Manufacturer	: CATERPILLAR
Model	: C4.4
Serial Number	: JKT17542
Power	: 82 kW / 109 HP

**HAR 11-60.103 (a) (2) Statement why modification is considered minor
And request to use minor modification procedures.**

According to 11-60.1-81, "Minor Modification" means a modification which:

- (1) Does not increase the emissions of any air pollutant above the permitted emission limits;
- (2) Does not result in or increase the emissions of any air pollutant not limited by permit to levels equal to or above:

- (A) 500 pounds per year of a hazardous air pollutant, except lead;
 - (B) 300 pounds per year of lead;
 - (C) Twenty-five percent of significant amounts of emission as defined in section 11-60.1-1, paragraph (1) in the definition of "significant"; or
 - (D) Two tons per year of each regulated air pollutant not already identified above;
- (3) Does not violate any applicable requirement;
 - (4) Does not involve significant changes to existing monitoring requirements or any relaxation or significant change to existing reporting or recordkeeping requirements in the permit. Any change to the existing monitoring, reporting, or recordkeeping requirements that reduces the enforceability of the permit is considered a significant change;
 - (5) Does not require or change a case-by-case determination of an emission limitation or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
 - (6) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement, and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - (A) A federally enforceable emissions cap assumed to avoid classification as a modification pursuant to any provision of Title I of the Act or subchapter 7; and
 - (B) An alternative emissions limit approved pursuant to regulations promulgated pursuant to Section 112(i) (5) of the Act or subchapter 9; and
 - (7) Is not a modification pursuant to any provision of Title I of the Act.

The addition of a backup unit that is the same size and model of the unit it will replace, and will not run concurrently, does not increase emissions. The modification is in accordance with paragraphs (1) and (2).

This modification does not violate any applicable requirements and does not result in any changes to existing permit conditions and/or terms. The modification is in accordance with paragraphs (3) to (6).

This modification is not a modification pursuant to any provision of Title I of the Act. The modification is in accordance with paragraph (7).

Based on the above, we therefore ask that this modification be considered "minor" and that minor modification procedures be used.

HAR 11-60.103 (a) (3) Maximum Emission Rates

Since the modification concerns a backup unit that is the same size and model as the unit it will replace, and since the two units will not be running together at the same time, the maximum emission rates will be the same as the existing maximum emission rates.

New emission rate calculations are therefore not necessary.

HAR 11-60.103 (a) (4) Identification of New Applicable Requirements

There are no new applicable requirements related to this minor modification.

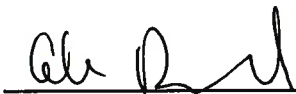
HAR 11-60.103 (a) (5) Changes to Permit Terms or Conditions

There are no suggested changes to permit terms or conditions.

HAR 11-60.103 (a) (6) Certification

I herewith certify that to the best of my knowledge and belief this proposed modification meets the criteria for a minor modification.

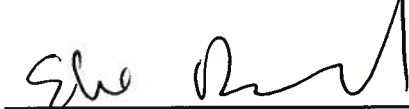
Name: Eli Brainerd Title: President

Signature:  Tel.: (808) 245-7171

HAR 11-60.103 (a) (7) Information previously submitted

Information submitted with the initial application for this permit and all subsequent information submitted is still current and applicable.

Name: Eli Brainerd Title: President

Signature:  Tel.: (808) 245-7171

HAR 11-60.103 (a) (8) Other Information

There is no other information.

HAR 11-60.1-113 (b) (3) (D) Nonmajor non-toxic covered source Minor Modification

The fee of \$ 100.00 for a minor modification to a nonmajor non-toxic covered source permit is enclosed.

Check No.: _____ Date: _____

APPENDIX A
LOCATION & SITE MAPS

The Location is the same as the last location change submitted for permit no. 0872-01-CT, and is already on file at Department of Health, Clean Air Branch.

APPENDIX B

Maximum ANNUAL EMISSIONS CALCULATIONS

As previously explained under paragraph HAR 11-60.103 (a) (3) Maximum Emission Rates:

Since the modification concerns a backup unit that is the same size and model as the unit it will replace, and since the two units will not be running together at the same time, the maximum emission rates will be the same as the existing maximum emission rates.

New emission rate calculations are therefore not necessary.

The emissions for the Chieftain 1400 screener listed on the Emissions Units Table on page 7 have been copied from the Emissions Units Table for the Chieftain 1400 screener submitted with the original permit application.

APPENDIX C

EQUIPMENT INFORMATION & DATA

This equipment information is for the backup screener.



Serial Number (Engine)	JKT17542
Engine Brand	CAT
Sales Model	C4.4
Engine Arrangement Number	4559407
Total Displacement	4.40 L
Rated Power	82.0 kW
Regulatory Engine Build Date	30-SEP-2020
Labeled Model Year	2020
EPA Family Code	LPKXL04.4MT1

Labeled Model Year	2020
EPA Family Code	LPKXL04.4MT1
EPA Emissions Level	EPA TIER 4f
CARB Family Code	LPKXL04.4MT1
Korea Type Approval	C4.4+4126/2200//15EN*PE*01
Regulatory Status	CAT_NR_EPA/CARB_MLIT_R120_R96_China Exp_EU Exp
Regulatory Status	CAT_Korea
Japan Emissions Level	STEP 4 FINAL
UN R120 Type Approval	1200 011120

MAR 24 2025

POSTMARK

MAR 21 2025

Application for
Renewal of Covered Source Permit No. 0872-01-CT
(HAR 11-60.1 – 101)

FACILITY NAME:

**Mobile Crushing and Screening Plants
Located at
Various Temporary Sites, State of Hawaii**

OWNER:

**PACIFIC CONCRETE CUTTING & CORING, INC (PCCC)
P.O. Box 662261
Lihue, HI 96766**

March 17, 2025

PREPARED BY:
CFM Environmental LLC
Tel.: (808) 779-2948
Email: fredpeyer@gmail.com

Ref. # 2501004

INTRODUCTION

This is an application for a renewal of permit no. 0872-01-CT, 353 TPH Powerscreen Trakpactor 320 mobile impact crusher (track-mounted), serial no. PIDTP320AOMG52384 with water spray system and 441 TPH Powerscreen Chieftain 1400 mobile screener (track-mounted), serial no. PID00066CDGKB1692, and backup screener 441 TPH Powerscreen Chieftain 1400 serial number PID00066PDGLA3684, located at various temporary sites, State of Hawaii, owned and operated by Pacific Concrete Cutting & Coring, Inc. (PCCC), P.O. Box 662261, Lihue, HI 96766.

The two Powerscreen Chieftain screeners will never be operated simultaneously. (Minor Modification Application to permit 0872-01-CT dated September 11, 2023.)

This is a straight-forward permit renewal. There are no changes to equipment, operation limitations, standards, or any other existing permit conditions as indicated in permit no. 0872-01-CT, issued April 7, 2021, expiring April 6, 2026, except for the modification mentioned above.

Equipment and location information are on file with the Department of Health, Clean Air Branch.

Request for alternate operating scenario:

The permittee may replace any diesel engine with another diesel engine of the same size or smaller, with the same or lower emissions should this become necessary due to a breakdown or major overhaul of the permitted engine.

Note:

The crusher and the screener are self-propelled mobile, with the engines propelling the units. The engines are therefore exempt pursuant to HAR 11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

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1. STANDARD PERMIT APPLICATION FORM S-1

11. Proposed Equipment/Plant Location Address: **ON FILE WITH DOH, CAB**
City: State: Zip Code:

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

12. General Nature of Business: **Mobile Crushing and Screening Plant**

13. Date of Planned Commencement of Construction or Modification: **upon approval**

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): **Brainerd** (First): **Eli** (MI):
Title: **President** Phone: **(808) 245-7171**

Mailing Address: **P.O. Box 662281**

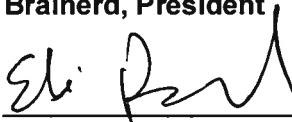
City: **Lihue** State: **HI** Zip Code: **96766**

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): **Eli Brainerd, President**

(Signature):



Date:

3/21/25

File/Application No.: **0872-01-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: **PACIFIC CONCRETE CUTTING & CORING, INC.**
2. Facility Name (if different from the Company): **Crushing and Screening Plants**
3. Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**
Phone Number: **(808) 245-7171**
4. Name of Owner/Owner's Agent: **Eli Brainerd**
Title: **President** Phone: **(808) 245-7171**
Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**
5. Plant Site Manager/Other Contact: **Eli Brainerd**
Title: **President** Phone: **(808) 245-7171**
Mailing Address: **P.O. Box 662281**
City: **Lihue** State: **HI** Zip Code: **96766**
6. Permit Application Basis: (Check One.)

Initial Permit for a New Source ☒ Renewal of Existing Permit Temporary Source Modification: ==> Is Modification?	Initial Permit for an Existing Source General Permit Transfer of Permit Significant Minor Uncertain
---	--
7. If renewal or modification, include existing permit number: **0872-01-CT**
8. Does the Proposed Source require a County Special Management Area Permit? Yes ☐ No ☒
9. Type of Source (Check One): ☒ Covered Source Noncovered Source ☐ Covered and PSD Source Uncertain
10. Standard Industrial Classification Code (SICC), if known: **1442**

COMPANY NAME: PACIFIC CONCRETE CUTTING & CORING, INC.

LOCATION: VARIOUS LOCATIONS STATE OF HAWAII

FILE NO: 0872-01-CT

PAGE 1 OF 2

EMISSIONS UNITS TABLE

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

[illegible]

COMPANY NAME: PACIFIC CONCRETE CUTTING & CORING, INC. FILE NO: 0872-01-CT

LOCATION: VARIOUS LOCATIONS STATE OF HAWAII PAGE 2 OF 2

(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	AIR POLLUTANT EMISSION RATE		UTM COORDINATES			STACK SOURCE PARAMETERS					
STACK NO.	UNIT NO.	EQUIPMENT NAME/ DESCRIPTION AND SICC CODE	EQUIP. DATE	REGULATED HAZARD. AIR POLLUT. NAME	# / HOUR	TONS/ YEAR	ZONE	EAST (M)	NORT (M)	HEIGHT ABOVE GROUND (M)	DIRECT.	INSIDE DIA. (M)	VEL (M/S)	ACTUAL FLOW RATE (M3/S)	TEMP. DEGREE K
		441 TPH Chieftain 1400 2-deck Screen	2019				4	On File	On File	N/A	N/A	N/A	N/A	N/A	N/A
								At DOH CAB	At DOH CAB						
					TSP Lb/hr	TSP TPY				PM10 Lb/hr	PM10 TPY	PM2.5 Lb/hr	PM2.5 TPY		
		Activity uncontrolled:													
		Screening		Fugitive Dust	11.025	48,290				3.837	16,805	1.151	5.041		
		Transfer Points		Fugitive Dust	5.292	23,179				1,940	8,499	0.582	2,550		
		Truck unloading		Fugitive Dust	0.044	0.193				0.044	0.193	0.013	0.058		
		TOTAL UNCONTROLLED		Fugitive Dust	16.361	71,662				5,821	25,497	1.746	7,649		
		Less 70% Control		Fugitive Dust	11.453	50,163				4,075	17,848	1.222	5,354		
		TOTAL CONTROLLED		Fugitive Dust	4.908	21,499				1,746	7,650	0.524	2,295		
		Stockpile & Unpaved Road Emissions for Crusher And Screener operating Independently		Fugitive Dust contr.	10.007	43,832				4,191	18,355	1.059	4,634		

File No.: **0872-01-CT**

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 | • Initial Covered Source Permit Application |
| • Temporary Noncovered Source Permit Application | X Temporary Covered Source Permit Application |
| • General Noncovered Source Permit Application | • General Covered Source Permit Application |
| • Application for a Noncovered Source Permit Renewal | • Application for a Covered Source Permit Renewal & Modification |
| • Application for a Modification to a Noncovered Source | • Application for a Minor 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?

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

{If NO, complete items a-c below}

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

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
Subchapter 9, Hazardous Air Pollutant Sources
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

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

PACIFIC CONCRETE CUTTING & CORING, INC states that the plants to be covered under this application are in compliance 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.

Description of Remedial Action

of Completion

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.

Description of Remedial Action

of Completion

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): **Eli Brainerd, President**

(Signature):



Date:

3/21/25

File No.: **0872-01-CT**

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;
- X Temporary Covered Source Permit Application;**
- General Covered Source Permit Application;
- Application for a Covered Source Permit Renewal & Modification
- 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.

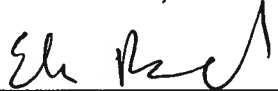
DURING THE TERM OF A COVERED SOURCE PERMIT: COMPLETE & SUBMIT THIS COVER PAGE AND SECTION B OF THIS FORM.

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): **Eli Brainerd, President**

(Signature):  Date: 3/21/25

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: **upon issuance of permit**
2. Emissions Unit No./Description: **308 TPH Powerscreen Premiertrak 330 jaw crusher, 441 TPH Powerscreen Chieftain 1400 2-deck screen**
3. Identify the applicable requirement(s) that is/are the basis of this certification:

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
Subchapter 9, Hazardous Air Pollutant Sources
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

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:

Annual Source Test
Sulfur in Fuel tested by Supplier
Daily Visual Observations
Monthly Visual Observation by Certified Reader

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

Application of Water Sprays

Record Keeping

Semi-Annual and Annual Emissions Report

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:	

HAR 11-60.1-101
Covered Source Permit Renewal Application

HAR 11-60.1-101 (a) (1) Company & Facility Information

For company and facility information please see Form S-1 on page 5.

HAR 11-60.1-101 (a) (2) Certification Statement

The responsible person herewith certifies that no changes have been made in the design or operation of the source as proposed in the initial and any subsequent covered source permit applications.

I certify that I have knowledge of the facts herein set forth, 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: Eli Brainerd, President

Signature: Sh Brainerd Date: 3/21/25

The following equipment is listed on the existing permit no. 0872-01-CT and is to be permitted with this permit renewal application:

Permit no. 0872-01-CT, Attachment II, Section A. 1.:

- a. 353 TPH Powerscreen mobile impact crusher (track-mounted), 2-deck, model Trakpactor 320, serial no. PIDTP320AOMG52384 with water spray system;
- b. 441 TPH Powerscreen mobile screener (track-mounted), model Chieftain 1400, serial no. PID00066CDGKB1692;
- c. Various conveyors; and
- d. Water Sprays.

There are no changes to the equipment as listed above and on permit no. 0872-01-CT except for the addition of 441 TPH Powerscreen mobile screener (track-mounted), model Chieftain 1400, serial no. PID00066PDGLA3684 as a backup screen to replace the permitted 441 TPH Powerscreen Chieftain 1400 in case of breakdown and/or major overhaul. The two identical screens will never be operated simultaneously. (See modification application dated Sept. 11, 2023)

HAR 11-60.1-101 (a) (3) Compliance Plan

Please see page 9 for the signed compliance plan.

HAR 11-60.1-101 (a) (4) Compliance Certification

Please see page 12 for the signed compliance certification.

HAR 11-60.1-101 (a) (5) Other Information

Detailed Description of Equipment, Processes and Products:

Standard Industrial Classification Code (SICC) : 1442
Equipment Information is on file at the Department of Health (DOH), Clean Air Branch (CAB).

Equipment

Crusher:

Manufacturer	Powerscreen
Year Manufactured	2018
Model	Trakpactor 320 self-propelled on tracks
Serial Number	PIDTP320AOMG52384
Max Production Rate (TPY)	353

Crusher Engine:

Manufacturer	Scania
Year Manufactured	2018
Model	DC9 85A
Serial Number	6036406
Size (HP)	345

The crusher is mobile, with the engine propelling the unit. The engine is therefore exempt pursuant to HAR 11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

Screen:

Manufacturer	Powerscreen
Year Manufactured	2019
Model	Chieftain 1400 self-propelled on tracks
Serial Number	PID00066CDGKB1692
Max Production Rate (TPY)	441

Screen Engine:

Manufacturer	Caterpillar
Year Manufactured	2019
Model	C4.4
Serial Number	JKT14530
Size (HP)	110

The screen is mobile, with the engine propelling the unit. The engine is therefore exempt pursuant to HAR 11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

Insignificant Activity as per HAR 11-60.1-82(f)

All insignificant equipment information is on file with the DOH-CAB under permit number 0872-01-CT.

Processes

The source falls under SIC code 1442 (Construction Sand and Gravel)

Source material are rocks and/or unpainted concrete.

The plant produces aggregate from larger rocks or unpainted concrete.

The rocks are fed into the crusher either by front-end loader or conveyor belt. Undersize material is separated from the other material in the hopper/feeder and travels on the side conveyor to a different stockpile. All other material is crushed and travels on the main conveyor to a separate stockpile, OR if the 2-deck screen works together with the crusher, the material is transferred from the crusher conveyor to the screen conveyor. It is then separated into three different sizes which travel on separate conveyors to three different stockpiles.

Air Pollution Control & Estimate of Emissions:

There are no changes to existing air pollution control equipment.

The crusher and the screen are equipped with water-sprays to control fugitive dust. Unpaved plant areas and stockpiles are controlled by water truck or by existing water supply. The accepted rate of reduction for fugitive dust controlled by water sprays, is 70%.

For emission rates and calculation of maximum emissions in lbs/hour and tpy, please see Appendix B, Emission Calculations.

Emission Calculations and Assumptions:

Maximum emission calculations for fugitive dust from the jaw crusher and screen are based on EPA AP42, tables 11.19.2-2, 8/04, 13.2.4, 11/06, 13.2.2, 11/06, and CEIDARS table PM2.5 fractions for Mineral Products, Crushing, Screening, Blasting, Loading and Unloading; on the maximum throughput of the plant as indicated by the manufacturer (253 tpy); and on 8760 hours/year.

Maximum uncontrolled emissions are reduced by a 70% control factor since water sprays and (if applicable) a water truck, or grid water are used to control fugitive dust.

For emission calculations please see Appendix B. For manufacturer information regarding plant throughput, please see Appendix C.

Controlled fugitive emissions:

Controlled Crusher & Screen Emissions and Trigger Levels (TPY)					
Pollutant	Emissions (No Limits)	BACT Significant Levels	AERR Thresholds	DOH Levels	Wind Erosion And Vehicle Travel Emissions
CO	0	100	1000	250	0
NO _x	0	40	100	25	0
SO ₂	0	40	100	25	0
PM (TSP)	28.225	25	-	25	43.832
PM10	10.851	15	100	25	18.355
PM2.5	3.255	10	100	-	4.634
VOC	0	40	100	25	0
HAPs	0	-	-	5	0

This is a permit renewal. BACT does not apply.

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
Subchapter 9, Hazardous Air Pollutant Sources
40 Code of Federal Regulations (CFR) Part 60 – Standards of Performance for New Stationary Sources
Subpart A – General Provisions
Subpart I – Standards of Performance for Hot Mix Asphalt Facilities
Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 Code of Federal Regulations (CFR) Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories
Subpart A – General Provisions
Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Current Operational Limitations or Work Practices:

There are no changes to existing operational limitations or work practices as indicated in permit no. 0794-01-C.

Operating Hour Limits:

The total operating hours of the drum mix asphalt plant, as represented by the total combined operating hours of the 680 HP and 563 HP DEG's, shall not exceed five thousand (5,000) hours in any rolling twelve (12) month period.

Operational Restrictions:

The drum-mixer/dryer and scalping screen shall be powered only by the 680 HP or the 563 HP DEG (or temporary replacement unit).

Fuel Limitations:

The drum-mixer/dryer shall be fired only on the following fuels:

- Ultra Low Sulfur Diesel (ULSD) with a maximum sulfur content not to Exceed 0.0015% by weight, or
- Liquefied petroleum gas (propane).

The 680 HP and 563 HP DEG's shall be fired only on ULSD fuel with the following specifications:

- Maximum sulfur content not to exceed 0.0015% by weight; and
- Minimum cetane index of forty (40) or maximum aromatic content of thirty-

Five (35) volume percent.

As well as all other existing restrictions and requirements of CSP 0794-01-C, Attachment II, Section C.

Schedule for Construction or Modification:

Not applicable, this is a permit renewal and the plant covered under this permit is already operating.

Existing Covered Sources: Ambient Air Quality Impact Assessment:

Since there have been no changes to the permitted equipment, an ambient air quality impact assessment is not deemed necessary.

New Covered Sources: Ambient Air Quality Impact Assessment:

Not applicable, this is a permit renewal.

New Covered Sources: Requirements of 11-60.1, Subchapter 7:

Not applicable, this is a permit renewal.

Emissions Trading:

Not applicable.

Insignificant Activities:

There is no change to existing insignificant activities.

HAR 11-60.1-113 Application Fees for Covered Sources

HAR 11-60.1-113 (b) (4) (C) Renewal of a nonmajor non-toxic covered source

The application fee of \$ 500.00 for a nonmajor non-toxic covered source permit renewal is enclosed.

Check No 6518 dated 3/21/2025 made payable to:

CLEAN AIR SPECIAL FUND-COV

APPENDIX A

LOCATION & SITE MAPS

The location of the plant is on file at the Department of Health, Clean Air Branch under permit no. 0872-01-CT

APPENDIX B

POTENTIAL ANNUAL EMISSIONS CALCULATIONS

Annual Emission Calculations for 353 TPH Trakpactor 320 Impact Crusher

Calculation Basis:

Maximum Processing rate : 353 TPH

Operating hours: 8760 hours/year

Emission Factors: AP 42 (11.19.2-2, 8/04, 13.2.4, 11/06, 13.2.2, 11/06

Fugitive Emissions of Particulate Matter (TSP):

Activity	SCC	Lb/hr	TPY
Primary Crushing uncontrolled	3-05-020-01	0.847	3.711
Conveyor Transfer Point uncontrolled (4)	3-05-020-06	4.236	18.554
Truck unloading uncontrolled	3-05-020-32	0.035	0.155
TOTAL UNCONTROLLED		5.118	22.420
Less Control (70%)		3.583	15.694
TOTAL CONTROLLED		1.535	6.726

Fugitive Emissions of Particulate Matter (PM10):

Activity	SCC	Lb/hr	TPY
Primary Crushing uncontrolled	3-05-020-01	0.847	3.711
Conveyor Transfer Point uncontrolled (4)	3-05-020-06	1.553	6.803
Truck unloading uncontrolled	3-05-020-32	0.035	0.155
TOTAL UNCONTROLLED		2.435	10.669
Less Control (70%)		1.705	7.468
TOTAL CONTROLLED		0.730	3.201

Fugitive Emissions of Particulate Matter (PM2.5):

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.

Activity	SCC	Lb/hr	TPY
Primary Crushing uncontrolled	3-05-020-01	0.254	1.113
Conveyor Transfer Point uncontrolled (4)	3-05-020-06	0.466	2.041
Truck unloading uncontrolled	3-05-020-32	0.011	0.046
TOTAL UNCONTROLLED		0.731	3.200
Less Control (70%)		0.512	2.240
TOTAL CONTROLLED		0.219	0.960

**Annual Emission Calculations for 441 TPH Powerscreen Turbo Chieftain
1400 Double Deck Screen**

Calculation Basis:

Maximum Processing rate : 441 TPH

Operating hours: 8760 hours/year

Emission Factors: AP 42 (11.19.2-2, 8/04, 13.2.4, 11/06, 13.2.2, 11/06

Fugitive Emissions of Particulate Matter (TSP):

Activity	SCC	Lb/hr	TPY
Screening	3-05-020-02,03	11.025	48.290
Conveyor Transfer Point uncontrolled (4)	3-05-020-06	5.292	23.179
Truck unloading uncontrolled	3-05-020-32	0.044	0.193
TOTAL UNCONTROLLED		16.361	71.662
Less Control (70%)		11.453	50.163
TOTAL CONTROLLED		4.908	21.499

Fugitive Emissions of Particulate Matter (PM10):

Activity	SCC	Lb/hr	TPY
Screening	3-05-020-02,03	3.837	16.805
Conveyor Transfer Point uncontrolled (4)	3-05-020-06	1.940	8.499
Truck unloading uncontrolled	3-05-020-32	0.044	0.193
TOTAL UNCONTROLLED		5.821	25.497
Less Control (70%)		4.075	17.848
TOTAL CONTROLLED		1.746	7.650

Fugitive Emissions of Particulate Matter (PM2.5):

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.

Activity	SCC	Lb/hr	TPY
Screening	3-05-020-02,03	1.151	5.041
Conveyor Transfer Point uncontrolled (4)	3-05-020-06	0.582	2.550
Truck unloading uncontrolled	3-05-020-32	0.013	0.058
TOTAL UNCONTROLLED		1.746	7.649
Less Control (70%)		1.222	5.354
TOTAL CONTROLLED		0.524	2.295

TPY Combined Emissions (Controlled)
for Trakpactor Crusher and Chieftain Screen

Pollutant	Trakpactor (tpy)	Chieftain (tpy)	Total (tpy)
Particulate Matter TSP	6.726	21.499	28.225
Particulate Matter PM10	3.201	7.650	10.851
Particulate Matter PM2.5	0.960	2.295	3.255

Storage Pile and Unpaved Roads Fugitive Emissions for crusher and screen running independently
(Powerscreen Trakpactor 320, Powerscreen Chieftain 1400)

Emissions are based on the following:

Maximum Hours per year 8760

Tonnage (353 tph + 441 tph = 794 tph)

Fugitive Emissions of Particulate Matter (TSP):

Activity	SCC	Lb/hr	TPY
Storage Piles uncontrolled		22.516	98.622
Unpaved Roads uncontrolled		10.842	47.486
TOTAL UNCONTROLLED		33.358	146.108
Less Control (70%)		23.351	102.276
TOTAL CONTROLLED		10.007	43.832

Fugitive Emissions of Particulate Matter (PM10):

Activity	SCC	Lb/hr	TPY
Storage Piles uncontrolled		10.650	46.646
Unpaved Roads uncontrolled		3.319	14.537
TOTAL UNCONTROLLED		13.969	61.183
Less Control (70%)		9.778	42.828
TOTAL CONTROLLED		4.191	18.355

Fugitive Emissions of Particulate Matter (PM2.5):

Activity	SCC	Lb/hr	TPY
Storage Piles uncontrolled		3.195	13.994
Unpaved Roads uncontrolled		0.332	1.454
TOTAL UNCONTROLLED		3.527	15.448
Less Control (70%)		2.469	10.814
TOTAL CONTROLLED		1.058	4.634

Calculations of Emissions for Crushed Stone Processing Operations					
Client:	PACIFIC CONCRETE CUTTING & CORING, INC.			Date:	
Facility:	353 TPH TRAKPACTOR 320 HORIZONTAL IMPACT CRUSHER			3/14/2025	
Permit No.:	0872-01-CT		JOB#	2501004	
Annual Production Rate Calculations:			Annual Production (tpy)	Annual Production (cy/year)	
INPUT FIELDS:		hrs/year			8760
cy/hr	0	tons/hr			353
		Transfer Points			4
			3,092,280	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	1.906	8.349
Tertiary Crushing contr.	3-05-020-03	0.00120	0.424	1.855
Fines Crushing	3-05-020-05	0.03900	13.767	60.299
Fines Crushing contr.	3-05-020-05	0.00300	1.059	4.638
Screening	3-05-020-02,03	0.02500	8.825	38.654
Screening contr.	3-05-020-02,03	0.00220	0.777	3.402
Fines Screening	3-05-020-21	0.30000	105.900	463.842
Fines Screening contr.	3-05-020-21	0.00360	1.271	5.566
Conveyor Transfer Point	3-05-020-06	0.00300	1.059	4.638
Conv. Transfer Point contr.	3-05-020-06	0.00014	0.049	0.216
Wet Drilling - Unfrag.Stone	3-05-020-10	N/D	0.000	0.000
Truck unload - Fragn.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	1.059	Total:	4.236
No of Points:	4	tons/year per point	4.638	Total:	18.55368

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	3,092,280		10.010	43.846
TOTAL TSP CONTROLLED (-70%) FOR STORAGE PILES				3.003	13.154
PM-10 UNCONTROLLED:				20.738 tons/year	

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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	0.847	3.711
*Primary Crushing contr.	3-05-020-01	0.00054	0.191	0.835
*Secondary Crushing	3-05-020-02	0.00240	0.847	3.711
*Secondary Crushing contr.	3-05-020-02	0.00054	0.191	0.835
Tertiary Crushing	3-05-020-03	0.00240	0.847	3.711
Tertiary Crushing contr.	3-05-020-03	0.00054	0.191	0.835
Fines Crushing	3-05-020-05	0.01500	5.295	23.192
Fines Crushing contr.	3-05-020-05	0.00120	0.424	1.855
Screening	3-05-020-02,03	0.00870	3.071	13.451
Screening contr.	3-05-020-02,03	0.00074	0.261	1.144
Fines Screening	3-05-020-21	0.07200	25.416	111.322
Fines Screening contr.	3-05-020-21	0.00220	0.777	3.402
Conveyor Transfer Point	3-05-020-06	0.00110	0.388	1.701
Conv. Transfer Point contr.	3-05-020-06	4.60E-05	0.016	0.071
Wet Drilling - Unfrag.Stone	3-05-020-10	8.00E-05	0.028	0.124
Truck unload - Fragn.Stone	3-05-020-31	1.60E-05	0.006	0.025
Truck unload - conv.crushed	3-05-020-32	0.00010	0.035	0.155

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	0.388	Total: 1.553
No of Points:	4	tons/year per poin	1.701	Total: 6.803

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: $E = k(0.0032) \times [(U/5)^{1.3}] / [(M/2)^{1.4}]$				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:		Ann.Prod.		Total PM-10	Total PM-10
PM-10	0.013	(tpy)		(lb/hr)	(tpy)
TSP	0.028	3,092,280		4.735	20.738
PM-10 CONTROLLED (-70%)FOR STORAGE PILES				1.420	6.221

PAGE 3**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	0.254	1.113
Primary Crushing contr.	3-05-020-01	0.00016	0.057	0.250
Secondary Crushing*	3-05-020-02	0.00072	0.254	1.113
Secondary Crushing contr.	3-05-020-02	0.00016	0.057	0.250
Tertiary Crushing*	3-05-020-03	0.00072	0.254	1.113
Tertiary Crushing contr.	3-05-020-03	0.00016	0.057	0.250
Fines Crushing*	3-05-020-05	0.00450	1.589	6.958
Fines Crushing contr.	3-05-020-05	0.00036	0.127	0.557
Screening*	3-05-020-02,03	0.00261	0.921	4.035
Screening contr.	3-05-020-02,03	0.00022	0.078	0.343
Fines Screening*	3-05-020-21	0.02160	7.625	33.397
Fines Screening contr.*	3-05-020-21	0.00066	0.233	1.020
Conveyor Transfer Point*	3-05-020-06	0.00033	0.116	0.510
Conv. Transfer Point contr.	3-05-020-06	1.38E-05	0.005	0.021
Wet Drilling - Unfrag.Stone*	3-05-020-10	2.40E-05	0.008	0.037
Truck unload - Fragm.Stone*	3-05-020-31	4.80E-06	0.002	0.007
Truck unload - conv.crushed*	3-05-020-32	0.00003	0.011	0.046

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

Storage Piles

	Emission PM10	Emission PM2.5	
lbs/hour	4.735	1.420	(PM10 emissions x 0.3)
tons/year	20.738	6.221	(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:	0.466
No of Points:	4	tons/year per point	5.10E-01	Total:	2.041

Calculations of Emissions for Crushed Stone Processing Operations					
Client:	PACIFIC CONCRETE CUTTING & CORING, INC.			Date:	
Facility:	441 TPH POWERSCREEN TURBO CHIEFTAIN 1400			3/14/2025	
Permit No.:	0872-01-CT		JOB#	2501004	
Annual Production Rate Calculations:			Annual Production (tpy)	Annual Production (cy/year)	
INPUT FIELDS:		hrs/year			8760
cy/hr	0	tons/hr			441
		Transfer Points			4
			3,863,160	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	2.381	10.431
Tertiary Crushing contr.	3-05-020-03	0.00120	0.529	2.318
Fines Crushing	3-05-020-05	0.03900	17.199	75.332
Fines Crushing contr.	3-05-020-05	0.00300	1.323	5.795
Screening	3-05-020-02,03	0.02500	11.025	48.290
Screening contr.	3-05-020-02,03	0.00220	0.970	4.249
Fines Screening	3-05-020-21	0.30000	132.300	579.474
Fines Screening contr.	3-05-020-21	0.00360	1.588	6.954
Conveyor Transfer Point	3-05-020-06	0.00300	1.323	5.795
Conv. Transfer Point contr.	3-05-020-06	0.00014	0.062	0.270
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	1.323	Total: 5.292
No of Points:	4	tons/year per point	5.795	Total: 23.17896

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:			Ann.Prod.	Total TSP	Total TSP
PM-10	0.013	(tpy)		(lb/hr)	(tpy)
TSP	0.028	3,863,160		12.506	54.776
TOTAL TSP CONTROLLED (-70%)FOR STORAGE PILES				3.752	16.433
PM-10 UNCONTROLLED:	25.908 tons/year				

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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	1.058	4.636
*Primary Crushing contr.	3-05-020-01	0.00054	0.238	1.043
*Secondary Crushing	3-05-020-02	0.00240	1.058	4.636
*Secondary Crushing contr.	3-05-020-02	0.00054	0.238	1.043
Tertiary Crushing	3-05-020-03	0.00240	1.058	4.636
Tertiary Crushing contr.	3-05-020-03	0.00054	0.238	1.043
Fines Crushing	3-05-020-05	0.01500	6.615	28.974
Fines Crushing contr.	3-05-020-05	0.00120	0.529	2.318
Screening	3-05-020-02,03	0.00870	3.837	16.805
Screening contr.	3-05-020-02,03	0.00074	0.326	1.429
Fines Screening	3-05-020-21	0.07200	31.752	139.074
Fines Screening contr.	3-05-020-21	0.00220	0.970	4.249
Conveyor Transfer Point	3-05-020-06	0.00110	0.485	2.125
Conv. Transfer Point contr.	3-05-020-06	4.60E-05	0.020	0.089
Wet Drilling - Unfrag.Stone	3-05-020-10	8.00E-05	0.035	0.155
Truck unload - Fragn.Stone	3-05-020-31	1.60E-05	0.007	0.031
Truck unload - conv.crushed	3-05-020-32	0.00010	0.044	0.193

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	0.485	Total:	1.940
No of Points:	4	tons/year per point	2.125	Total:	8.499

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: $E = k(0.0032) \times [((U/5)^{1.3}) / ((M/2)^{1.4})]$				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 PM-10 (lb/hr)	Total PM-10 (tpy)
PM-10	0.013	Ann.Prod. (tpy)			
TSP	0.028	3,863,160		5.915	25.908
PM-10 CONTROLLED (-70%)FOR STORAGE PILES				1.775	7.772

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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	0.318	1.391
Primary Crushing contr.	3-05-020-01	0.00016	0.071	0.313
Secondary Crushing*	3-05-020-02	0.00072	0.318	1.391
Secondary Crushing contr.	3-05-020-02	0.00016	0.071	0.313
Tertiary Crushing*	3-05-020-03	0.00072	0.318	1.391
Tertiary Crushing contr.	3-05-020-03	0.00016	0.071	0.313
Fines Crushing*	3-05-020-05	0.00450	1.985	8.692
Fines Crushing contr.	3-05-020-05	0.00036	0.159	0.695
Screening*	3-05-020-02,03	0.00261	1.151	5.041
Screening contr.	3-05-020-02,03	0.00022	0.098	0.429
Fines Screening*	3-05-020-21	0.02160	9.526	41.722
Fines Screening contr.*	3-05-020-21	0.00066	0.291	1.275
Conveyor Transfer Point*	3-05-020-06	0.00033	0.146	0.637
Conv. Transfer Point contr.	3-05-020-06	1.38E-05	0.006	0.027
Wet Drilling - Unfrag.Stone*	3-05-020-10	2.40E-05	0.011	0.046
Truck unload - Fragm.Stone*	3-05-020-31	4.80E-06	0.002	0.009
Truck unload - conv.crushed*	3-05-020-32	0.00003	0.013	0.058

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

Storage Piles

	Emission PM10	Emission PM2.5	
lbs/hour	5.915	1.775	(PM10 emissions x 0.3)
tons/year	25.908	7.772	(PM10 emissions x 0.3)

Un-Controlled Emission Calculations for multiple Transfer Points:

No of Points:	4	lbs/hr per point	1.46E-01	Total:	0.582
No of Points:	4	tons/year per point	6.37E-01	Total:	2.550

Calculations of Emissions for Crushed Stone Processing Operations					
Client:	PACIFIC CONCRETE CUTTING & CORING, INC.			Date:	
Facility:	STOCKPILE EMISSIONS FOR CRUSHER AND SCREEN			3/14/2025	
Permit No.:	0872-01-CT		JOB#	2501004	
Annual Production Rate Calculations:			Annual Production (tpy)	Annual Production (cy/year)	
INPUT FIELDS:	hrs/year	8760			
cy/hr	0	tons/hr			794
	Transfer Points	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	4.288	18.780
Tertiary Crushing contr.	3-05-020-03	0.00120	0.953	4.173
Fines Crushing	3-05-020-05	0.03900	30.966	135.631
Fines Crushing contr.	3-05-020-05	0.00300	2.382	10.433
Screening	3-05-020-02,03	0.02500	19.850	86.943
Screening contr.	3-05-020-02,03	0.00220	1.747	7.651
Fines Screening	3-05-020-21	0.30000	238.200	1043.316
Fines Screening contr.	3-05-020-21	0.00360	2.858	12.520
Conveyor Transfer Point	3-05-020-06	0.00300	2.382	10.433
Conv. Transfer Point contr.	3-05-020-06	0.00014	0.111	0.487
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:	0	lbs/hr per point	2.382	Total: 0
No of Points:	0	tons/year per point	10.433	Total: 0

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:			Ann.Prod.	Total TSP (lb/hr)	Total TSP (tpy)
PM-10	0.013	(tpy)			
TSP	0.028	6,955,440		22.516	98.622
TOTAL TSP CONTROLLED (-70%) FOR STORAGE PILES				6.755	29.587
PM-10 UNCONTROLLED:		46.646	tons/year		

PAGE 2

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	1.906	8.347
*Primary Crushing contr.	3-05-020-01	0.00054	0.429	1.878
*Secondary Crushing	3-05-020-02	0.00240	1.906	8.347
*Secondary Crushing contr.	3-05-020-02	0.00054	0.429	1.878
Tertiary Crushing	3-05-020-03	0.00240	1.906	8.347
Tertiary Crushing contr.	3-05-020-03	0.00054	0.429	1.878
Fines Crushing	3-05-020-05	0.01500	11.910	52.166
Fines Crushing contr.	3-05-020-05	0.00120	0.953	4.173
Screening	3-05-020-02,03	0.00870	6.908	30.256
Screening contr.	3-05-020-02,03	0.00074	0.588	2.574
Fines Screening	3-05-020-21	0.07200	57.168	250.396
Fines Screening contr.	3-05-020-21	0.00220	1.747	7.651
Conveyor Transfer Point	3-05-020-06	0.00110	0.873	3.825
Conv. Transfer Point contr.	3-05-020-06	4.60E-05	0.037	0.160
Wet Drilling - Unfrag.Stone	3-05-020-10	8.00E-05	0.064	0.278
Truck unload - Fragn.Stone	3-05-020-31	1.60E-05	0.013	0.056
Truck unload - conv.crushed	3-05-020-32	0.00010	0.079	0.348

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:	0	lbs/hr per point	0.873	Total:	0.000
No of Points:	0	tons/year per point	3.825	Total:	0.000

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: $E = k(0.0032) \times [((U/5)^{**1.3}) / ((M/2)^{**1.4})]$					
where: E=emission factor, k=particle size multiplier(dimensionless)				Hilo 7.2 mph	
U=mean wind speed (mph), M=material moisture content				Honolulu 11.4 mph	
				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:		Ann.Prod.		Total PM-10	Total PM-10
PM-10	0.013	(tpy)		(lb/hr)	(tpy)
TSP	0.028	6,955,440		10.650	46.646
PM-10 CONTROLLED (-70%) FOR STORAGE PILES				3.195	13.994

PAGE 3**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	0.572	2.504
Primary Crushing contr.	3-05-020-01	0.00016	0.129	0.563
Secondary Crushing*	3-05-020-02	0.00072	0.572	2.504
Secondary Crushing contr.	3-05-020-02	0.00016	0.129	0.563
Tertiary Crushing*	3-05-020-03	0.00072	0.572	2.504
Tertiary Crushing contr.	3-05-020-03	0.00016	0.129	0.563
Fines Crushing*	3-05-020-05	0.00450	3.573	15.650
Fines Crushing contr.	3-05-020-05	0.00036	0.286	1.252
Screening*	3-05-020-02,03	0.00261	2.072	9.077
Screening contr.	3-05-020-02,03	0.00022	0.176	0.772
Fines Screening*	3-05-020-21	0.02160	17.150	75.119
Fines Screening contr.*	3-05-020-21	0.00066	0.524	2.295
Conveyor Transfer Point*	3-05-020-06	0.00033	0.262	1.148
Conv. Transfer Point contr.	3-05-020-06	1.38E-05	0.011	0.048
Wet Drilling - Unfrag.Stone*	3-05-020-10	2.40E-05	0.019	0.083
Truck unload - Fragm.Stone*	3-05-020-31	4.80E-06	0.004	0.017
Truck unload - conv.crushed*	3-05-020-32	0.00003	0.024	0.104
EMISSIONS IN BOLD ONLY ARE USED FOR EMISSION CALCULATIONS FOR THIS PLANT!				

Storage Piles

	Emission PM10	Emission PM2.5	
lbs/hour	10.650	3.195	(PM10 emissions x 0.3)
tons/year	46.646	13.994	(PM10 emissions x 0.3)

Un-Controlled Emission Calculations for multiple Transfer Points:

No of Points:	0	lbs/hr per point	2.62E-01	Total:	0.000
No of Points:	0	tons/year per point	1.15E+00	Total:	0.000

Calculations of PM30 (TSP) Emissions for Unpaved Roads					
Client:	PACIFIC CONCRETE CUTTING & CORING, INC.				
Facility:	UNPAVED ROAD EMISSIONS FOR CRUSHER & SCREEN				
Date:	3/14/2025	PERMIT NO.	0872-01-CT	JOB #	2501004

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)*	189	PM-30	2.867

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
794	8760	21	0.1	33121.1

Uncontrolled PM30 in tons per year for unpaved roads: 47.486**Controlled PM30 (tpy) for unpaved roads (-70%):** 14.246**Uncontrolled PM30 in lbs/hr** 10.842**Controlled PM30 in lbs/hr** 3.252

* Lihue 1020, Station 515575, 1949 - 2000

Calculations of PM10 Emissions for Unpaved Roads				
Client:	PACIFIC CONCRETE CUTTING & CORING, INC.			
Facility:	UNPAVED ROAD EMISSIONS FOR CRUSHER & SCREEN			
Date:	3/14/2025	PERMIT NO.	0872-01-CT	JOB # 2501004

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) PM-10	1.500	*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)*	189	PM-10	0.878

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
794	8760	21	0.1	33121.1

Uncontrolled PM10 in tons per year for unpaved roads: 14.537**Controlled PM10 (tpy) for unpaved roads (-70%):** 4.361**Uncontrolled PM10 in lbs/hr** 3.319**Controlled PM10 in lbs/hr** 0.996

* Lihue 1020, Station 515575, 1949 - 2000

Calculations of PM _{2.5} Emissions for Unpaved Roads					
Client:	PACIFIC CONCRETE CUTTING & CORING, INC.				
Facility:	UNPAVED ROAD EMISSIONS FOR CRUSHER & SCREEN				
Date:	3/14/2025	PERMIT NO.	0872-01-CT	JOB #	2501004

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) PM _{2.5}	0.150	*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)*	189	PM _{2.5}	0.088

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
794	8760	21	0.1	33121.1

Uncontrolled PM₃₀ in tons per year for unpaved roads: 1.454**Controlled PM₃₀ (tpy) for unpaved roads (-70%):** 0.436**Uncontrolled PM₃₀ in lbs/hr** 0.332**Controlled PM₃₀ in lbs/hr** 0.100

* Lihue 1020, Station 515575, 1949 - 2000

APPENDIX C

EQUIPMENT INFORMATION & DATA

Equipment information is on file at the Department of Health, Clean Air Branch under permit no. 0872-01-CT.

Facility Emissions

Pollutant	Total Facility Emissions (TPY)		Capturable Emissions (TPY)		Non-Capturable Fugitive Emissions (TPY)		New Equipment Non-Fugitive Only (Capturable) (Δ TPY)	Thresholds					Total Facility Emissions DOH CAB In-House (TPY)
	Limited 8760 hr/yr	Unlimited 8,760 hr/yr	Limited 8760 hr/yr	Unlimited 8,760 hr/yr	Limited 8760 hr/yr	Unlimited 8,760 hr/yr		Non-Fugitive Emissions					
								BACT significant (TPY)	AERR Type A (1-year) (T)	AERR Type B (3-year) (T)	Major source (TPY)	Synthetic Minor (yes/no)	
CO	0.00	0.00	0.00	0.00	n/a	n/a	0.00	100	2500	1000	100	no	250
NO _x	0.00	0.00	0.00	0.00	n/a	n/a	0.00	40	2500	2500	100	no	25
SO ₂	0.000	0.000	0.00	0.00	n/a	n/a	0.00	40	2500	100	100	no	25
PM	216.94	216.94	1.86	1.86	215.09	215.09	0.00	25	n/a	n/a	100	no	25
PM-10	59.31	59.31	0.83	0.83	58.48	58.48	0.00	15	250	100	100	no	25
PM-2.5	25.05	25.05	0.15	0.15	24.89	24.89	0.00	10	n/a	100	100	no	25
VOC	0.00	0.00	0.00	0.00	n/a	n/a	0.00	40	250	100	100	no	25
HAPs	0.00	0.00	0.00	0.00	n/a	n/a	0.00	(Lead) 0.6	(Lead) n/a	(Lead) 0.5	100	no	5
NH ₃	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	250	100	n/a	n/a

note:

1. Capturable Fugitive Emissions from one (1) impact crusher without including the insignificant activity of one (1) 77 hp DE (Note: When combined, the total project emissions do not exceed major source levels).

2. Non-Capturable Fugitive Emissions from truck loading, truck unloading, screeners, conveyors, storage piles, and unpaved roads.

3. BACT, AERR, Major source, and Synthetic Minor determinations do not include fugitive PM, PM₁₀ and PM_{2.5}.

4. BACT determination is not applicable to fugitive and nonroad engine emissions.

5. DOH CAB In-House determination is based on the total facility limited emissions if applicable.

Greenhouse Gas

GHG	GWP	GHG Mass-Based Emissions 8,760 hr/yr (TPY)	CO ₂ e Based Emissions 8,760 hr/yr (TPY)	CO ₂ e Based Emissions 8,760 hr/yr (Metric TPY)
CO ₂	1	412.73	412.73	374.42
CH ₄	25	0.02	0.42	0.38
N ₂ O	298	0.0033	0.98	0.90
Total			414.14	375.70

Regulations

BACT HAR 11-60.1, Subchapter 5 (yes/no)	AERR 40 CFR 51 Subpart A (yes/no)	PSD CFR 52 (yes/no)	40 CFR 60 NSPS (yes/no)	NESHAPs 40 CFR 61 (yes/no)	NESHAPs 40 CFR 63 (yes/no)	CAM 40 CFR 64 (yes/no)	CAB In-House (yes/no)
No	No	No	Yes Subpart 000	No	No	No	Yes CSP, PM, PM ₁₀

Stone Processing

AP-42, Chapter 11, Section 11.19.2 - Crushed Stone Processing and Pulverized Mineral Processing (8/04)

Emissions (lb/hr) = Emission Factor (lb/ton) x Processing Capacity (ton/hr)

	Value	Unit	Notes
Hour Limit	8760	hour/year	unlimited
Processing Capacity - Powerscreen impact crusher, Trakpactor 320 (s/n PIDTP320AOMG52384)	353	ton/hour	0872-01 filing
Processing Capacity - Powerscreen screener, Chieftain 1400 (s/n PID00066CDGKB1692)	441	ton/hour	0872-01 filing
Processing Capacity - Powerscreen screener, Chieftain 1400 (s/n PID00066PDGLA3684)	441	ton/hour	0872-02 filing
Total Processing Capacity	1235	ton/hour	unlimited and independent
Conveyor(s) - Powerscreen impact crusher	1	-	0872-01 filing (1 main conveyor)
Conveyor(s) - Powerscreen Screener	4	-	0872-01 filing (1 main+3 product conveyors)
Conveyor(s) - Powerscreen Screener	4	-	0872-02 filing (1 main+3 product conveyors)
Conveyor(s) - MGL Engineering radial stacker	1	-	0872-01 filing (1 main conveyor)
Fines screening percentage for Powerscreen Chieftain 1400	33.33%	-	Estimate fines for the fines product conveyor
Control Efficiency	70%	%	Wet suppression prior to screening

PM	Capacity (ton/hour)	EF (lb/ton)	Emissions (lb/hr)	Emissions (TPY)	
				8,760 hr/yr	8,760 hr/yr
Impact Crusher - Powerscreen Trakpactor 320 (s/n PIDTP320AOMG52384, controlled EF)	353	1.20E-03	0.42	1.86	1.86
Total Non-Fugitive PM			0.42	1.86	1.86
Truck Loading	1235	1.96E-04	0.07	0.32	0.32
Truck Unloading	1235	3.14E-05	0.012	0.05	0.05
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066CDGKB1692, screening - uncontrolled EF)	441	2.50E-02	2.21	9.66	9.66
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066CDGKB1692, fines screening - uncontrolled EF)	441	3.00E-01	13.23	57.94	57.94
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066PDGLA3684, screening - uncontrolled EF)	441	2.50E-02	2.21	9.66	9.66
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066PDGLA3684, fines screening - uncontrolled EF)	441	3.00E-01	13.23	57.94	57.94
Conveyor Transfer Point(s) (1x) - Powerscreen Trakpactor 320 impact crusher (controlled EF)	353	1.40E-04	0.05	0.22	0.22
Conveyor Transfer Point(s) (4x) - Powerscreen Chieftain 1400 screener (uncontrolled EF)	441	3.00E-03	1.59	6.95	6.95
Conveyor Transfer Point(s) (4x) - Powerscreen Chieftain 1400 screener (uncontrolled EF)	441	3.00E-03	1.59	6.95	6.95
Conveyor Transfer Point(s) (1x) - MGL Engineering radial stacker (uncontrolled EF)	800	3.00E-03	0.72	3.15	3.15
Total Fugitive PM			34.90	152.85	152.85
Total PM			35.32	154.70	154.70

1 of 2
Screeners
67.60
Total
Conveyors
17.28

PM-10	Capacity (ton/hour)	EF (lb/ton)	Emissions (lb/hr)	Emissions (TPY)	
				8,760 hr/yr	8,760 hr/yr
Impact Crusher - Powerscreen Trakpactor 320 (s/n PIDTP320AOMG52384, controlled EF)	353	5.40E-04	0.19	0.83	0.83
Total Non-Fugitive PM-10			0.19	0.83	0.83
Truck Loading	1235	1.00E-04	0.04	0.16	0.16
Truck Unloading	1235	1.60E-05	0.006	0.03	0.03
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066CDGKB1692, screening - uncontrolled EF)	441	8.70E-03	0.77	3.36	3.36
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066CDGKB1692, fines screening - uncontrolled EF)	441	7.20E-02	3.17	13.91	13.91
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066PDGLA3684, screening - uncontrolled EF)	441	8.70E-03	0.77	3.36	3.36
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066PDGLA3684, fines screening - uncontrolled EF)	441	7.20E-02	3.17	13.91	13.91
Conveyor Transfer Point(s) (1x) - Powerscreen Trakpactor 320 impact crusher (controlled EF)	353	4.60E-05	0.02	0.07	0.07
Conveyor Transfer Point(s) (4x) - Powerscreen Chieftain 1400 screener (uncontrolled EF)	441	1.10E-03	0.58	2.55	2.55
Conveyor Transfer Point(s) (4x) - Powerscreen Chieftain 1400 screener (uncontrolled EF)	441	1.10E-03	0.58	2.55	2.55
Conveyor Transfer Point(s) (1x) - MGL Engineering radial stacker (uncontrolled EF)	800	1.10E-03	0.26	1.16	1.16
Total Fugitive PM-10			9.37	41.05	41.05
Total PM-10			9.56	41.88	41.88

1 of 2
Screeners
17.27
Total
Conveyors
6.33

PM-2.5	Capacity (ton/hour)	EF (lb/ton)	Emissions (lb/hr)	Emissions (TPY)	
				8,760 hr/yr	8,760 hr/yr
Impact Crusher - Powerscreen Trakpactor 320 (s/n PIDTP320AOMG52384, controlled EF)	353	1.00E-04	0.04	0.15	0.15
Total Non-Fugitive PM-2.5			0.04	0.15	0.15
Truck Loading	1235	2.94E-05	0.01	0.05	0.05
Truck Unloading	1235	4.71E-06	0.002	0.01	0.01
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066CDGKB1692, screening - uncontrolled EF)	441	3.75E-03	0.33	1.45	1.45
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066CDGKB1692, fines screening - uncontrolled EF)	441	4.50E-02	1.98	8.69	8.69
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066PDGLA3684, screening - uncontrolled EF)	441	3.75E-03	0.33	1.45	1.45
Screener - Powerscreen Chieftain 1400 screener (s/n PID00066PDGLA3684, fines screening - uncontrolled EF)	441	4.50E-02	1.98	8.69	8.69
Conveyor Transfer Point(s) (1x) - Powerscreen Trakpactor 320 impact crusher (controlled EF)	353	1.30E-05	0.0046	0.02	0.02
Conveyor Transfer Point(s) (4x) - Powerscreen Chieftain 1400 screener (uncontrolled EF)	441	4.50E-04	0.24	1.04	1.04
Conveyor Transfer Point(s) (4x) - Powerscreen Chieftain 1400 screener (uncontrolled EF)	441	4.50E-04	0.24	1.04	1.04
Conveyor Transfer Point(s) (1x) - MGL Engineering radial stacker (uncontrolled EF)	800	4.50E-04	0.11	0.47	0.47
Total Fugitive PM-2.5			5.23	22.91	22.91
Total PM-2.5			5.27	23.07	23.07

1 of 2
Screeners
10.14
Total
Conveyors
2.58

notes:

1. EFs from AP-42 Fifth Edition, Chapter 11, Table 11.19.2-2 (8/04)

2. Assume PM-10 = 51% of PM and PM-2.5 = 15% of PM when no data available (AP-42 Appendix B.2 (1/95))

3. 70% control efficiency was not applied to the crusher and equipped conveyor since controlled EFs were used for crusher equipped with water spray system.

3. 70% control efficiency was applied to the truck loading, truck unloading, screeners, and screeners' conveyors for the use of water spray as needed.

Vehicle Travel on Unpaved Roads

AP-42, Chapter 13, Section 13.2.2 - Unpaved Roads (11/06)

Emissions (lb/hr) = Emission Factor (lb/VMT) x Vehicle Miles Traveled (VMT/hr)

Vehicle Miles Traveled (VMT)

	Value	Unit	Notes
Hour Limit	8760	hour/year	Unlimited
Processing Capacity	1235	ton/hour	(1) crusher + (2) screeners
Vehicle Load Capacity	21	ton	
Travel Distance Roundtrip	0.25	mile	
Average VMT/hour	14.70	VMT/hour	Distance x Processing Capacity / Load
Total VMT	128793	VMT/year	VMT/hour x Annual Hour Limit

Mean Vehicle Weight

	Value	Unit	Notes
Mean Vehicle Weight	26.5	tons	

Mean vehicle weight assumed average tare weight of 16 tons and average gross weight of 37 tons

Emission Factors

For vehicles traveling on unpaved surfaces at industrial sites:

$$E = k(s/12)^a(W/3)^b$$

where: E = size-specific emission factor (lb/VMT)
s = surface material silt content (%)
W = mean vehicle weight (tons)
k,a,b = empirical constants

$$E_{ext} = E[(365-P)/365]$$

where: E_{ext} = annual size-specific emission factor extrapolated for natural mitigation (lb/VMT)
P = number of days in a year with at least 0.01 in of precipitation (wrcc.dri.edu, Lihue WSO AP 1020.1)

	Value			Unit	Notes
	PM-2.5	PM-10	PM		
k	0.15	1.5	4.9	lb/VMT	AP-42 Table 13.2.2-2
a	0.9	0.9	0.7	-	AP-42 Table 13.2.2-2
b	0.45	0.45	0.45	-	AP-42 Table 13.2.2-2
s	3.9			%	AP-42 Sec. 13.2.2 - Related Information (used
P	198			day	Lihue WSO AP 1020.1 (www.wrcc.dri.edu)

Pollutant	E (lb/VMT)	E _{ext} (lb/VMT)	Control Efficiency	Emissions (lb/hr)	Emissions (TPY)	
					8,760 hr/yr	8,760 hr/yr
PM	5.95	2.72	70%	12.00	52.56	52.56
PM-10	1.45	0.67	70%	2.93	12.85	12.85
PM-2.5	0.15	0.07	70%	0.29	1.29	1.29

notes:

1. 70% control efficiency was assumed for water suppression (AP-42, Chapter 11, Section 11.19.1.2 (11/95))



Storage Piles

AP-42, Chapter 13, Section 13.2.4 - Aggregate Handling and Storage Piles (11/06)

Emissions (lb/hr) = Emission Factor (lb/ton) x Processing Capacity (ton/hr)

	Value	Unit	Notes
Hour Limit	8760	hour/year	Unlimited
Processing Capacity	1235	ton/hour	(1) crusher + (2) screeners
k (PM)	0.74	-	AP-42 Sec. 13.2.4.3
k (PM-10)	0.35	-	AP-42 Sec. 13.2.4.3
k (PM-2.5)	0.053	-	AP-42 Sec. 13.2.4.3
U	10.725	mph	AP-42 Table 7.1-7 (06/2020) (HI average)
M	2.1	%	AP-42 Table 13.2.4-1 (various limestone products)

Emission Factors

$E = k(0.0032)(U/5)^{1.3}/(M/2)^{1.4}$, (lb/ton)

where: E (lb/ton)

k = particle size multiplier

U = mean wind speed (mph)

M = material moisture content (%)

Pollutant	E (lb/ton)	Control Efficiency	Emissions (lb/hr)	Emissions (TPY)	
				8,760 hr/yr	8,760 hr/yr
PM	5.96E-03	70%	2.21	9.68	9.68
PM-10	2.82E-03	70%	1.05	4.58	4.58
PM-2.5	4.27E-04	70%	0.16	0.69	0.69

notes:

1. 70% control efficiency was assumed for water suppression (AP-42, Chapter 11, Section 11.19.1.2 (11/95))

77 hp Deutz TD2011L04I Diesel Engine (Name plate: serial no. 11953258) for MGL Engineering M95

AP-42, Chapter 3, Section 3.3 - Gasoline and Diesel Industrial Engines (10/96)

Emissions (lb/hr) = Emission Factor (g/(hp-hr)) x hp x Conversion Factor (2.20462 lb/1,000 g); or

Emissions (lb/hr) = Heat Input Rate (MMBtu/hr) x Emission Factor (lb/MMBtu)

	Value	Unit	Notes
Hour Limit	8760	hour/year	Unlimited
Fuel Consumption	4.19	gallon/hour	Manufacturer's data, 0872-01 filing
Power	77.2	hp	Manufacturer's data specified 77.2 hp
Diesel Fuel Sulfur Content	0.0015	%	ULSD requirement
Diesel Fuel Heating Value	137000	Btu/gallon	Diesel
Heat Input Rate	0.57	MMBtu/hour	Fuel Consumption x Heating Value

Pollutant	EF g/(hp-hr)	EF (lb/MMBtu)	EF (kg/MMBtu)	Emissions (lb/hr)	Emissions (TPY)	
					8,760 hr/yr	8,760 hr/yr
CO		0.95		0.55	2.39	2.39
NO _x		4.41		2.53	11.10	11.10
SO ₂		0.29		0.001	0.004	0.004
PM		0.31		0.178	0.780	0.780
PM-10		0.31		0.178	0.780	0.780
PM-2.5		0.31		0.178	0.780	0.780
TOC		0.35		0.20	0.88	0.88
CO ₂		164	73.96	94.23	412.73	412.73
CH ₄			0.003	0.004	0.017	0.017
N ₂ O			0.0006	0.001	0.003	0.003

notes:

1. CO, NO_x, PM, TOC, CO₂ EFs (lb/MMBtu) from AP-42, Chapter 3, Table 3.3-12. SO₂ emissions = fuel rate (gal/hr) x diesel fuel density (7.05 lb/gal) x %S x (64.06 SO₂ g/mol / 32.065 S g/mol)

3. Assume all PM to be ≤ 1 μm in size (AP-42, Chapter 3, Table 3.3-1, footnote b)

4. CH₄, N₂O EFs (kg/MMBtu) from 40 CFR 98 Table C-2

Hazardous Air Pollutant (HAP)	EF (lb/MMBtu)	Emissions (lb/hr)	Emissions (TPY)	
			8,760 hr/yr	8,760 hr/yr
Benzene	9.33E-04	5.36E-04	2.35E-03	2.35E-03
Toluene	4.09E-04	2.35E-04	1.03E-03	1.03E-03
Xylenes	2.85E-04	1.64E-04	7.17E-04	7.17E-04
1,3-Butadiene	3.91E-05	2.25E-05	9.84E-05	9.84E-05
Formaldehyde	1.18E-03	6.78E-04	2.97E-03	2.97E-03
Acetaldehyde	7.67E-04	4.41E-04	1.93E-03	1.93E-03
Acrolein	9.25E-05	5.31E-05	2.33E-04	2.33E-04
Total PAH	1.68E-04	9.65E-05	4.23E-04	4.23E-04
Total HAPs		0.002	0.010	0.010

notes:

1. HAP EFs (lb/MMBtu) from AP-42, Chapter 3, Table 3.3-2