

**PERMIT APPLICATION REVIEW
TEMPORARY COVERED SOURCE PERMIT NO. 0633-02-CT
Application for Significant Modification No. 0633-04
Application for Permit Renewal No. 0633-03**

Company: Rojac Trucking, Inc.

Mailing Address: 150 Pakana Street
Wailuku, Hawaii 96793

Facility: Crushing and Screening Plants

Location: Various Temporary Sites, State of Hawaii

Initial Location: Off East Waiko Road, Wailuku, Maui

SIC Code: 1429 (Crushed and Broken Stone, Not Elsewhere Classified)

Responsible Official: Mr. Ronald Jacintho
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PROPOSED PROJECT

Rojac Trucking, Inc. owns and operates a mobile crushing plant and will add a mobile screening plant for stone processing and screening activities. The equipment is used to crush rock and other materials for construction purposes. Materials are batch-dropped into a primary crusher then forwarded via screens and conveyors to a stockpile.

The existing equipment now consists of only one (1) primary track-mounted crusher, Extec C-12. The primary crusher is self-propelled by the integrated diesel engine. The engine will be removed from the permit since it propels the crusher and is exempt pursuant to HAR §11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

The other existing equipment (crusher and screen) listed on the permit dated August 8, 2007, was not transferred to Rojac Trucking, Inc. from Semtex Systems dba Seacon Technologies on September 4, 2008 and is removed from the current permit. The total operating hours of the previous crushing and screening plants with two crushers and one screen was limited to 6000 hours in any rolling twelve-month (12-month) period. This operation limitation is no longer applicable. There will be no operating limitations for the existing crushing plant and proposed screening plant.

Proposed Modification

Rojac has submitted an application for significant modification to add a 661 TPH mobile screen with 99 HP exempt diesel engine (Chieftain 2100) to its crushing and screening equipment.

The proposed modification does not meet the criteria for minor modification as defined in HAR §11-60.1-81. The permit has been revised to incorporate the visible emission limits of 40 CFR Part 60, Subpart OOO for the proposed mobile screen. Project emissions have been recalculated to reflect the removal of the Semtex crusher and screen that was not transferred to Rojac. The screening plant may be operated in conjunction with the existing crushing plant or independently.

The following equipment will be **removed** from the permit as they were not transferred from Semtex Systems:

1. 250 TPH Extec IC-13 Mobil Jaw Crusher with 440 HP Caterpillar diesel engine, serial no. TBD;
2. 559 TPH Extec Mobile Screen, serial no. 10006, with three conveyors and powered by exempt diesel engine.

The mobile crushing and screening plant limitation to 6,000 hours at any one location in any rolling twelve-month (12-month) period will be removed as the crushing and screening plants now consist of only one crusher and one screen. The operating hour limitations were used to limit emissions below BACT thresholds.

There are no other proposed changes to existing equipment in the design or operation of the facility.

EQUIPMENT DESCRIPTION

- a. 340 TPH Extec C-12 Mobile Crusher, serial no. 9967: with exempt 350 HP Caterpillar diesel engine, model C-9, serial no. MDBO1330 (**existing equipment**);
- b. 661 TPH Chieftain 2100 Mobile Screen with exempt diesel engine (**added, this modification**); and
- c. Various conveyors and water sprays.

AIR POLLUTION CONTROLS

The crushing and screening plants are equipped with water spray systems to control fugitive dust. Water trucks/water sprays will be used as necessary to minimize fugitive dust from plant operations, material transfer points, stockpiles, and plant roads.

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

11-60.1-38, Sulfur Oxides from Fuel Combustion

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 9, Hazardous Air Pollutant Sources

Subchapter 10, Field Citations

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

Subpart 000 – Standards of Performance for Nonmetallic Mineral Processing Plants is applicable to the stone processing and screening plant because the maximum capacity of the plant is greater than 150 tons/hour, and the plant was manufactured after August 31, 1983.

The 340 TPH Extec C-12 Mobile Crusher (existing) was manufactured before April 22, 2008. The 661 TPH Powerscreen Chieftain 2100 (modification) was manufactured after April 22, 2008. Equipment that commence construction, modification, or reconstruction on or after April 22, 2008, have more stringent fugitive emission opacity limits.

Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines is not applicable to the diesel engines and because the engines are considered nonroad engines as defined in 40 CFR §1068.30.

Subpart IIII applies to stationary internal combustion engines that are not nonroad engines.

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

This source is not subject to NESHAPs because there are no standards in 40 CFR Part 61 applicable to this facility.

NESHAPs for Source Categories (Maximum Achievable Control Technology (MACT)), 40 CFR Part 63

Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) is not applicable to diesel engine because the engines are considered nonroad engines as defined in 40 CFR §1068.30. Subpart ZZZZ applies to stationary internal combustion engines that are not nonroad engines.

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

This source is not subject to PSD requirements because it is not a major stationary source as defined in 40 CFR §52.21 and HAR, Title 11, Chapter 60.1, Subchapter 7.

Compliance Assurance Monitoring (CAM), 40 CFR 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, 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 100% of the major source level; and (5) not otherwise be exempt from CAM.

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

AERR is not applicable because potential emissions from the facility do not exceed AERR thresholds.

CAB In-house Annual Emissions Reporting

The Clean Air Branch (CAB) requests annual emissions reporting from those facilities that have facility wide emissions exceeding in-house reporting levels and for all covered sources. Annual emissions reporting will be required because this facility is a covered source.

Best Available Control Technology (BACT)

This source is not subject to BACT analysis because there is no significant increase in potential emissions due to the modification. BACT analysis is required for new sources or modifications to sources that have the potential to emit or increase emissions above significant levels considering any limitations as defined in HAR, §11-60.1-1.

Synthetic Minor Source

A synthetic minor source is a facility that is potentially major, as defined in HAR, §11-60.1-1, but is made non-major through federally enforceable permit conditions. This facility is not a synthetic minor source because potential emissions do not exceed major source thresholds when the facility is operated without limitations for 8,760 hours/year.

INSIGNIFICANT ACTIVITIES / EXEMPTIONS

The diesel engine powering the 661 TPH mobile screen is considered an insignificant activities in accordance with HAR §11-60.1-82(f)(2) because the heat input capacities of the diesel engine is less than one (1) MMBtu/hr.

The existing primary crusher, Extec C-12, is self-propelled by the integrated diesel engine. The engine will be removed from the permit since it propels the crusher and is exempt pursuant to HAR §11-60.1-82(d)(4), which exempts internal combustion engines propelling mobile sources.

ALTERNATIVE OPERATING SCENARIOS

Diesel Engines and Diesel Engine Generators

The applicant did not propose any alternate operating scenarios.

PROJECT EMISSIONS

There will be no significant increase (BACT) in emissions due to the addition of the proposed 661 TPH mobile screen with exempt diesel engine. The existing permit for Rojac contained equipment, Extec IC-13 crusher and Extec E-7 screen that were not transferred from Semtex Systems dba Seacon Technologies. Project emissions have been revised to reflect existing conditions.

Total facility emissions are summarized in the tables below:

340 TPH Mobile Crushing Plant with 661 TPH Chieftain 2100 Screening Plant

Total Facility Emissions and Trigger Levels (TPY)					
Pollutant	Emissions (No Limits)	BACT Significant Levels	AERR Thresholds	DOH Levels	Storage Pile 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	9.6	25	-	25	44.2
PM-10	3.5	15	100	25	13.6
PM-2.5	0.3	10	100	-	1.6
VOC	0	40	100	25	0
HAPs	0	-	-	5	0

Extec C-12 crusher and added new Chieftain 2100 2x screen, with Extec IC-13 crusher and Extec E-7 screen removed

Greenhouse Gas (GHG) Emissions

There are no GHG emissions because emissions from the crushing and screening plants are fugitive in nature.

AIR QUALITY ASSESSMENT

An ambient air quality impact analysis (AAQIA) is generally required for new or modified sources to demonstrate compliance with State and National ambient air quality standards.

An AAQIA is not required for the proposed exempt diesel engine on the Chieftain 2100 screening plant. Other emissions from the proposed screen is fugitive in nature and do not require an ambient air quality impact analysis.

SIGNIFICANT PERMIT CONDITIONS

There are new permit conditions for this significant modification.

Chieftain 2100 screening plant fugitive emissions will be limited to not greater than seven (7) percent opacity. The screen construction date is after April 22, 2008. Performance testing, reporting and recordkeeping need to be added to the permit to meet the requirements of 40 CFR 60, Subpart OOO.

CONCLUSION

Rojac Trucking, Inc. has submitted an application for significant modification to add a 661 TPH mobile screening plant to its mobile crushing plant. There is no significant increase in emissions. Recommend issuance of the covered source permit subject to the incorporation of the permit conditions, forty five-day (45-day) Environmental Protection Agency review period and thirty-day (30-day) public comment period.

GS:dh
January 2015