

PROPOSED

Temporary Covered Source Permit (CSP) No. 0481-01-CT Renewal Application No. 0481-04

Applicant: Bolton, Inc.

Facility: 475 TPH Portable Stone Processing Plant

SIC Code: 1442 (Construction Sand and Gravel)

Location: Various sites, State of Hawaii

Initial Location: TMK: (3) 7-5-10:003, 760 ft. south-east of the Nani Kailua and Hualalai Road Intersection, and 380 ft. south off Hualalai Road, Kailua-Kona, Hawaii

Responsible Official: Mr. Stan Marks
Compliance Officer
73-4174 Huliko'a Drive
Kailua-Kona, HI 96740
808 329-8240 office / 808 896-0505 cel.

Contact: same

I. Equipment Description

Unit	Manufacturer	Model No.	Serial No.	Max. Capacity	Manuf. Date
Primary jaw crusher with grizzly feeder	Aggregate Machinery, Inc.	Thunderbird II, 3350JVDH-D-3396	Plant: 2022-00 Jaw: 402363	475 TPH	2000
Horizontal impact crusher with 2-deck screen	Aggregate Machinery, Inc.	Thunderbird II, 13156163IC-D2860	10094	225 TPH	2000
Radial stacker	Aggregate Machinery, Inc.	Thunderbird II, 4280PRS30	2025-00	N/A	2000
Diesel engine	Cummins	M11-P	35006865	330 HP @ 2100 rpm, 15.9 gph	2000
Diesel engine generator	Cummins engine	NTA855-G3	30364208	480 HP @ 1800 rpm, 22.9 gph	2000
	Onan generator	DFCC4482307	E000108406		

II. Background

Bolton, Inc. operates an existing portable stone processing plant in Kailua-Kona. This stone quarrying and processing plant will be used to process rock. Material to be crushed is loaded into the grizzly feeder of the jaw crusher by front end loader. The crushed material travels on conveyor belt #1 and #2 to the screening decks of the impact crusher. Oversize material is fed into the impact crusher, then returned to the screening decks on conveyor belts #3 and #2. Material from the screening decks is carried on conveyor #4 to a transfer conveyor and then to a stacking conveyor to a stockpile. Other sized material can also be pulled from points between grizzly feeder and conveyor #1, between screening decks and impact crusher or between conveyor belts #3 and #2 by a transfer conveyor to a separate stockpile.

The 330 HP Cummins diesel engine (DE) provides power to the jaw crusher. The 480 HP Cummins Onan diesel engine generator (DEG) provides power to the impact crusher/screen and radial stacker. Both engines use diesel no. 2 with a maximum sulfur content of 0.5% by weight.

Operations are typically conducted for eight (8) hours per day, five (5) days per week. The plant may be used at a particular site for periods of time ranging from a few weeks to up to a year. The applicant is not proposing any changes to the permit. The 330 HP DE and 480 HP DEG will continue to each be limited to 3,000 hours of operation per rolling twelve-month (12-month) period and monitored via non-resetting hour meters.

Asked Stan Marks to confirm the following:

4/26/12 R.O. (Stan Marks); current location (same as last location change); equipment list (including model nos. & SNs); and

5/2/12 mobile non-road engines? Yes, rarely have a job that lasts longer than two (2) months.

The \$500 renewal fee for Temporary Covered Source Permit (CSP) No. 0481-01-CT was processed. Issuance of Temporary CSP No. 0481-01-CT will supersede said permit as issued on June 29, 2005.

III. Air Pollution Control:

Sulfur dioxide emissions are controlled using fuel containing no more than 0.5% sulfur by weight.

A water spray system is operated and maintained to control fugitive dust emissions. Per application (6/26/09), location of water sprays include the following:

- Transfer point from grizzly feeder to jaw crusher
- Transfer point from jaw crusher to conveyor 1
- Transfer point from conveyor 1 to conveyor 2
- Above conveyor 2
- Transfer point from screening decks to impact crusher
- Transfer point from impact crusher to conveyor 3
- Transfer point from conveyor 3 to conveyor 2
- Transfer point from conveyor 4 to transfer conveyor
- Transfer point from transfer conveyor to stacking conveyor
- Transfer point from stacking conveyor to stockpiles

Water is obtained from public or private water lines and portable water tanks. When a portable water tank is used, water is pumped using an electric water pump with approximate pumping capacity of 900 gallons per hour. The pump is powered by a 3.5 HP gas generator which is considered an insignificant activity. A water truck is used to control fugitive dust from stockpiles, crushing areas and truck access routes.

IV. Applicable Requirements:

Applicable Hawaii Administrative Rules (HAR):

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

40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. The jaw crusher meets the applicability trigger of being a portable nonmetallic mineral processing plant with a capacity greater than 150 tons per hour which also commences construction, reconstruction, or modification after August 31, 1983. The crushers, screen, and conveyor(s), are subject to the regulation.

Synthetic minor status: 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 a synthetic minor** based on potential emissions greater than 100 tons per year of each criteria pollutant when the equipment is operated for 8,760 hours per year. See the **Project Emissions** section for details.

V. Non-Applicable Requirements:

NSPS/NESHAP applicability: The 330 HP DE & 480 HP DEG are not subject to 40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) or 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). The DE & DEG are by definition nonroad engines. The DE and DEG are transportable and will be used at temporary locations where they will not remain at the site for more than twelve (12) consecutive months. Nonroad engines are not subject to NSPS or NESHAP regulations. Conditions will be incorporated into the permit to ensure the DE and DEG remain nonroad engines through the life of the permit.

BACT Applicability: A BACT review is required for new or modified sources which will result in a significant net emissions increase as defined in HAR §11-60.1-1. Since this is a renewal with no proposed modifications, a BACT review is not required.

PSD Applicability: The facility is not subject to review of PSD applicability because the potential to emit from the facility is less than 100 tons per year of each criteria pollutant.

NESHAP Applicability: These requirements do not apply because no standard covering the facility's operation or equipment has been promulgated under 40 CFR 61.

MACT Applicability: These requirements do not apply because the facility is not a major source of hazardous air pollutants and the facility does not belong to a source category or subcategory for which a standard has been promulgated under 40 CFR 63.

Compliance Assurance Monitoring Applicability: 40 CFR Part 64 Compliance Assurance Monitoring (CAM) rule. The facility is not subject to the CAM rule since it is not a major source of emissions.

Part 51, Subpart A, Emission Inventory Reporting Requirements – Air Emissions Reporting Requirements (AERR)/Consolidated Emissions Reporting Rule (CERR) determines the applicability of compliance emissions reporting on the emissions of each air pollutant from the facility. AERR/CERR (same thresholds) requirements do not apply because facility emissions do not equal or exceed the threshold levels. However annual emissions reporting is required of all covered sources.

Minimum Point Source Reporting Thresholds by Pollutant			
Pollutant	Annual Cycle type A sources	Three-year cycle type B sources	Facility Emissions ^a
	tons/year	tons/year	tons/year
SO _x	≥ 2500	≥ 100	4.10
VOC	≥ 250	≥ 100	1.43
NO _x	≥ 2500	≥ 100	20.73
CO	≥ 2500	≥1000	5.81
Pb		≥ 5	not available
PM ₁₀	≥ 250	≥ 100	12.49
PM _{2.5}	≥ 250	≥ 100	4.27
Ammonia	≥ 250	≥ 100	

VI. Alternate Operating Scenarios: If the 330 DE and/or 480 HP DEG are inoperable, a unit of the same or smaller size will be used as a temporary replacement until the original DE or DEG is repaired and again operable.

VII. Insignificant Activities/Exempt Equipment:

Insignificant Activities	
Description	HAR Reference
1 - 250 gallon diesel fuel storage tank	11-60.1-82(f)(1) Any storage tank, reservoir, or other container of capacity equal to or less than 40,000 gallons storing volatile organic compounds, except those storage tanks, reservoirs, or other containers subject to any standard or other requirement pursuant to Sections 111 and 112 of the Act.
1 - 600 gallon diesel fuel	
1 - 3.5 HP gas engine generator to run the water pump as needed	11-60.1-82(g)(8) Gasoline fired portable industrial equipment less than 25 horsepower in size.

VIII. Facility Emissions:

Facility emissions remain unchanged for this permit renewal and were not recalculated. Emission levels were calculated previously in conjunction with Significant Modification 0481-03, issued June 29, 2005, and are restated in the following table for convenience. Detailed emission calculations can be found in the review for Significant Modification 0481-03 and renewal application 0481-02.

Facility Emissions with Operating Limits (TPY)							
Pollutant	330 HP DE	480 HP DEG	3.5 HP Gen	Crushing Operation	Unpaved Roads	Aggregate Handling	Total
CO	1.13	2.38	2.3				5.81
NOx	7.10	13.57	0.06				20.73
PM	0.13	0.21	0	13.18	21.55	1.65	36.72
PM-10	0.13	0.21	0	5.01	6.36	0.78	12.49
PM-2.5	0.13	0.21	0	2.70	0.98	0.25	4.27
SO2	1.68	2.42	0				4.10
TOC	0.23	0.40	0.8				1.43
Pb							0.00
HAPs	0.02	0.03					0.05

330 HP DE & 480 HP DEG assume 3,000 hr/yr (each) limit.

IX. Air Quality Assessment:

An ambient air quality assessment (AAQA) is generally required for new sources or modified sources with emission increases. An ambient air quality assessment is not required for this permit renewal because there are no changes or modifications proposed.

X. Conclusion

Recommend renewal of Temporary Covered Source Permit upon completion of Public Comment Period and EPA 45-day review.

May 23, 2012
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