

## PROPOSED

### COVERED SOURCE MINOR MODIFICATION APPLICATION REVIEW (0045-11)

Covered Source Permit (CSP) 0045-01-C

**APPLICANT:** Grace Pacific Corporation  
Makakilo Quarry

**LOCATION:** 91-920 Farrington Highway  
Kapolei, HI 96707

**RESPONSIBLE OFFICIAL:** Mr. Robert P. Singlehurst  
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**SIC CODE:** 1411 (Dimension Stone)

#### **PROPOSED PROJECT:**

The subject application, a minor modification to an existing covered source permit, seeks to permit an additional screen at the 600 TPH aggregate recycling plant. The screen was inadvertently left off of the equipment list for the 600 TPH aggregate recycling plant by the applicant.

Administrative amendments are also being made to clarify the visible emissions monitoring limits for the 150 TPH Screening Plant. The revised permit conditions are Special conditions C.2.b and D.5.c.

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### EQUIPMENT:

The modification to the existing covered source permit incorporates the addition of the following equipment and associated appurtenances to the 600 TPH Aggregate Recycling Plant:

1. Thunderbird 6162 re-screening station, serial number 2153-03

With the addition of the aforementioned screen, the complete list of permitted equipment at the Grace Makakilo Quarry is as follows (new equipment in bold):

1. 600 TPH Aggregate Recycling Plant
  - a. AMI 5020VGF Grizzly Feeder, s/n 2152-03, Manufactured 2002
  - b. Cedarapids JPR 3054 Jaw Crusher, 600 TPH, s/n 51636, Manufactured 2002
  - c. Cedarapids 5064 HSI Impact Crusher, 400 TPH, s/n 51687, Manufactured 2002
  - d. Cedarapids TSH 6203-32 Screen, s/n 51455, Manufactured 2002
  - e. Thunderbird 6162 re-screening station, serial number 2153-03, Manufactured 2002**
  - f. Assorted conveyor belts and stackers
  - g. Cummins QST30-G5 Diesel Engine Generator, 1000 kW, 63.3 gph, fired with diesel #2
  - h. Watersprays
2. 400 TPH Non-Portable Plant
  - a. Hydraulic Track Feeder
  - b. Vibrating Grizzly 6' x 8'
  - c. 400 TPH jaw crusher, Kue Ken model no. 150S, Serial No. 150S6477
  - d. 400 TPH double deck screen, Nordberg model no. unknown
  - e. 400 TPH cone crusher, Symons/Nordberg model no. 7
  - f. 400 TPH 3-deck screen, Nordberg model no. unknown
  - g. 400 TPH VSI crusher (crusher #4), Canica model no. 125
  - h. 400 TPH VSI crusher (crusher #5), Canica model no. 100S
  - i. 400 TPH VSI crusher (crusher #6), Canica model no. 95
  - j. 200 TPH crusher, Canica model no. 85
  - k. (4) - 100 TPH 2-deck screens Nordberg 6' x 20' - 2 deck
  - l. (4) - 250 TPH 3-deck screens Nordberg 6' x 20' - 3 deck
  - m. Assorted conveyor belts
  - n. Watersprays
3. 150 TPH Screening Plant
  - a. CAY Manufacturing Model 482 Screening Plant with integrated 58 hp diesel engine; serial no. 482-88-D-124
  - b. Assorted Conveyor Belts

### AIR POLLUTION CONTROL EQUIPMENT:

Air pollution control consists of watersprays located at various material transfer points (conveyor to conveyor, crusher to conveyor, conveyor to pile, etc.). A water truck is also utilized to control dust on roadways and throughout the yard. The water is obtained from an existing well, which is metered and read on a monthly basis. The control efficiency for the watersprays was assumed to be 70%.

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### **APPLICABLE REQUIREMENTS:**

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,  
& 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

Subchapter 10, Field Citations

### **PREVENTION OF SIGNIFICANT DETERIORATION (PSD):**

The addition of a screen to the aggregate recycling plant will result in an emissions increase. However, emissions from the screen were previously accounted for in the initial permitting of the aggregate recycling plant (see attached copy of emissions for application 0045-10, 2/20/03). This was done by using the emission factor for screening fines (0.071 lb/T) versus screening (0.015 lb/T). Therefore, this modification has already been reviewed for PSD applicability.

### **NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS):**

No hazardous air pollutants are emitted at significant levels. Therefore, National Emission Standards for Hazardous Air Pollutants (NESHAPS) does not apply.

### **NEW SOURCE PERFORMANCE STANDARDS (NSPS):**

40 CFR 60 Subpart OOO

Standards of Performance for Nonmetallic Mineral Processing Plants applies to the aggregate recycling plant. The screen was manufactured after August 1993, and thus is subject to NSPS, along with the remainder of the 600 tph Recycled Aggregate plant.

**CDS:** The CDS determination is unchanged. The facility is a type B CDS source because NSPS is applicable and potential emissions are below all applicable major source thresholds.

**CERR:** The facility is subject to the consolidated emissions reporting rule (CERR). The level of emissions require that reporting be done every three years.

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### **SYNTHETIC MINOR APPLICABILITY:**

The facility is currently classified as a major source. Therefore, synthetic minor applicability does not apply.

### **COMPLIANCE ASSURANCE MONITORING:**

Compliance Assurance Monitoring (CAM) does not apply to this facility because the unit is not subject to an emission limitation or standard.

### **BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REQUIREMENTS:**

Emissions from the screen were accounted for in the previous permit modification for the facility, (application 0045-10, 2/20/03). A BACT analysis for the screen emissions was done in conjunction with the permit modification for the aggregate recycling plant. Therefore, a BACT analysis is not required.

**INSIGNIFICANT ACTIVITIES/EXCEPTIONS:** None

**ALTERNATIVE OPERATING SCENARIOS:** None

### **PROJECT EMISSIONS:**

The addition of the screen to the aggregate recycling plant will increase plant emissions. However, the screening emission factor used in the initial permit review (0.071 lb/T) accounts for all in-line screening operations because there is only one crusher, and the screens are aligned in series. Therefore, emissions will not change from the levels previously determined. Refer to attached copy of emissions review from initial permit for aggregate recycling plant.

### **AIR QUALITY ASSESSMENT:**

The screen to be added to the facility is not a point source of emissions. Therefore, an ambient air analysis is not required for this modification.

### **OTHER ISSUES:**

This amendment also corrects miscellaneous typographical errors regarding the visible emissions requirements for the 150 TPH screening plant. The 150 TPH screening plant was incorrectly referred to in visible emissions requirements for both NSPS and non-NSPS sources. Since the 150 TPH screening plant is subject to NSPS, all references to non-NSPS visible emissions requirements for the 150 TPH screening plant have been removed.

### **SIGNIFICANT PERMIT CONDITIONS:**

There are no significant permit conditions resulting from the addition of the screen to the Aggregate Recycling Plant.

### **CONCLUSION AND RECOMMENDATION:**

The facility complies with all State and Federal standards with regards to air pollution. Recommend issuance of permit pending 45-day EPA review.

Kevin Kihara  
September 8, 2003