# WASHINGTON STATE DEPARTMENT OF ECOLOGY

# General Order of Approval No. 11AQ-GO-001 Stationary and Portable Rock Crushers

#### December 6, 2011

This General Order is applicable to any applicant applying for coverage in Adams, Asotin, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, San Juan, Stevens, Walla Walla, and Whitman counties, or any source that is regulated by the Washington State Department of Ecology (Ecology).

Pursuant to the Washington State Clean Air Act Chapter 70.94 Revised Code of Washington (RCW), Ecology General Regulations for Air Pollution Sources, Chapter 173-400 Washington Administrative Code (WAC), specifically WAC 173-400-110 (New Source Review), WAC 173-400-560 (General Order of Approval), and Chapter 173-460 WAC (Controls for New Sources of Toxic Air Pollutants), Ecology now finds the following:

## FINDINGS

- 1. Any stationary or portable rock crusher proposing to locate in one of the counties listed above or proposing to locate at a source that is regulated by Ecology may request coverage under this General Order.
- 2. A rock crusher cannot obtain coverage under this Order if it is part of a new major stationary source or constitutes a major modification to a major stationary source, which is subject to review under the Prevention of Significant Deterioration Program. The addition of the rock crusher to an existing source must not make the source subject to the Air Operating Permit (AOP) program or require a modification in an existing AOP permit.
- 3. The applicant must apply for coverage under this General Order. Please contact the appropriate Ecology office with jurisdiction over your source:

Air Quality Program Central Regional Office 15 West Yakima Avenue, Suite 200 Yakima, WA 98902-3401 Phone: (509) 575-2490

Industrial Section P.O. Box 47600 Olympia, WA 98504-7600 Phone: (360) 407-6900 Air Quality Program Eastern Regional Office 4601 N. Monroe Street Spokane, WA 99205-1295 Phone: (509) 329-3400

Nuclear Waste Program Hanford Unit 3100 Port of Benton Blvd. Richland, WA 99354 Phone: (360) 372-7950 Air Quality Program Northwest Regional Office 3190-160th Avenue S.E. Bellevue, WA 98008-5452

Or on the internet at www.ecy.wa.gov/programs/air/AOP\_Permits/Boiler/GeneralOrders.htm.

General Order of Approval No. 11-AQG-001 Stationary and Portable Rock Crushers December 6, 2011

- 4. The proposed source, if installed, constructed, and operated in accordance with the application and this General Order, will meet the requirements for Best Available Control Technology (BACT) for criteria pollutants and BACT for toxics (tBACT).
- 5. Any rock crusher with the capability of processing 25 tons of material per hour or more and commences construction, reconstruction, or is modified after August 31, 1983, may be subject to New Source Performance Standard 40 CFR 60 Subpart OOO. Please contact EPA Region 10, at (206) 553-1200 for more information.
- 6. This General Order applies to stationary and portable rock crushers.
  - 6.1. A stationary rock crusher is a plant that remains at the same location for longer than one year following start of operation.
  - 6.2. A portable rock crusher is a plant that remains at the same location (pit, quarry, or operating site) for less than or equal to 365 days following start of operations.
- 7. Permittees utilizing non-road engines must comply with the requirements of WAC 173-400-035.
- 8. Within thirty (30) days of receipt of an application for coverage under a General Order of Approval, Ecology shall notify the applicant in writing that the application is incomplete, approved, or denied. If an application is incomplete, Ecology shall notify the applicant of the information needed to complete the application. If an application is denied, Ecology shall notify the applicant of the reasons why the application is denied. Coverage under a General Order of Approval is effective as of the date of issuance of approval by Ecology.

**THEREFORE, IT IS ORDERED** that a rock crusher that meets the specification and limitations contained in this General Order, and more specifically detailed in the Technical Support Document prepared on December 1, 2011, is approved for construction, installation and operation, provided that the following conditions are met.

# **APPROVAL CONDITIONS**

## 1. OPERATION AND EMISSION LIMITATIONS

- 1.1. The rock crusher must be limited to:
  - 1.1.1. 14,400 tons of material processed each day.
  - 1.1.2. 1,000,000 tons of material processed each year.
- 1.2. Visible emissions from any rock crushing operation must be less than or equal to 10 percent opacity averaged over six (6) minutes as measured by 40 CFR Appendix A Method 9.

General Order of Approval No. 11-AQG-001 Stationary and Portable Rock Crushers December 6, 2011

- 1.3. The permittee must comply with the provisions contained in the attached Fugitive Dust Control Plan (FDCP).
- 1.4. The rock crusher must be located a minimum of 150 feet from the property line.
- 1.5. All portable operations must submit to the permitting authority an Air Quality Notification Form for Portable Sources at least 10 days prior to beginning operations at each new site. If operations are anticipated past the end date on a previously submitted notification, the applicant must notify the permitting authority before the end date listed on the original notification.
- 2. ADDITIONAL RESTRICTIONS FOR OPERATION AS A STATIONARY ROCK CRUSHER
  - 2.1. All stationary rock crusher equipment must use line power or must have a Notice of Construction Approval Order for power generators before operating as a stationary rock crusher.

### 3. ADDITIONAL RESTRICTIONS FOR OPERATION AS A PORTABLE ROCK CRUSHER

- 3.1. A portable rock crusher cannot remain at the same location (pit, quarry, or operating site) for more than 365 days following start of operations, without meeting the requirements for a stationary rock crusher listed in this General Order of Approval.
- 3.2. For portable operations that plan to stay at the same location for longer than one year, the permittee must submit to Ecology, the Air Quality Notification Form for Portable Sources. This form will be used to notify Ecology that the rock crusher intends to operate as a stationary source. Notification under this condition needs to be completed before the end of the one-year period from which operations started as a portable rock crusher.
- 3.3. Power generators and other nonroad engines cannot remain at the same location for longer than one year unless approval as a stationary source is granted under WAC 173-400-110.

### 4. REQUIRED PLANS

- 4.1. Operations and Maintenance (O&M) Manual
  - 4.1.1. The operational parameters and practices shall be included in an O&M manual for the facility to be prepared by the permittee. The O&M manual shall be maintained and followed by the permittee, and shall be available for review by Ecology upon request. Emissions that result from a failure to follow the requirements contained in the O&M manual relative to compliance with the conditions of this permit may be considered credible evidence that source is not

being properly operated and maintained. The O&M manual shall at a minimum include:

- 4.1.1.1. Normal operating parameters for all air pollution control and processing equipment.
- 4.1.1.2. A maintenance schedule for all air pollution control and processing equipment.
- 4.1.1.3. Monitoring and recordkeeping procedures and requirements.

### 5. MONITORING/RECORDKEEPING/REPORTING

- 5.1. The permittee must collect and retain the following information:
  - 5.1.1. Daily records of the amount of material processed must be kept for at least five (5) years. A permittee may use sales records in place of production records, so long as an inventory of crushed rock remaining at the end of the year is maintained.
  - 5.1.2. Daily water truck records shall be maintained and at a minimum include the date and amount of water used.
  - 5.1.3. Additional information may be requested at the discretion of the permitting agency.

# 6. GENERAL CONDITIONS

- 6.1. Access to the source for the purpose of determining compliance with the terms of this General Order of Approval by Ecology staff or the permitting agency staff must be permitted during normal business hours. Failure to allow such access is grounds for revocation of coverage under this General Order or an enforcement action under the Washington State Clean Air Act.
- 6.2. Legible copies of this General Order of Approval, the Coverage Order, and the O&M manual(s) must be kept on-site and available to employees in direct operation of the facility and must be available for review upon request by Ecology or the local authority.
- 6.3. Operation of the portable rock crusher must be conducted in compliance with all data and specifications submitted as part of the General Order application and in accordance with the O&M manual requirements.
- 6.4. The permittee is required to comply with applicable rules and regulations pertaining to air quality, and conditions of operation imposed upon issuance of this order. Any violation of applicable state and/or federal air quality rules and regulations or of the

terms of this approval is subject to the sanctions provided in Chapter 70.94 RCW. Authorization under this Order may be modified, suspended, or revoked in whole or part for cause including, but not limited to, the following:

- 6.4.1. Violation of any terms or conditions of this authorization.
- 6.4.2. Obtaining this authorization by misrepresentation or failure to fully disclose all relevant facts.
- 6.4.3. Receipt of this General Order requires the permittee to register the applicable source emission unit(s) with Ecology. Upon request, the permittee must submit an inventory of emissions from the applicable source emission unit(s) and pay all applicable registration fees.
- 6.4.4. The provisions of this General Order of Approval are severable and if any provision of this authorization, or application of any provisions of this authorization, to any circumstance is held invalid, the application of such provision to their circumstances, and the remainder of this authorization shall not be affected thereby.

## YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2). To appeal you must do the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

# ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
<b>Department of Ecology</b>	<b>Department of Ecology</b>
Attn: Appeals Processing Desk	Attn: Appeals Processing Desk
300 Desmond Drive SE	PO Box 47608
Lacey, WA 98503	Olympia, WA 98504-7608
<b>Pollution Control Hearings Board</b>	<b>Pollution Control Hearings Board</b>
1111 Israel Rd SW, Suite 301	PO Box 40903
Tumwater, WA 98501	Olympia, WA 98504-0903

For additional information, visit the Examinated Hearings Office website at http://www.eho.wa.gov.

**APPROVED BY:** 

Richard B. Hibbard, P.E. Program Development Section Air Quality Program

VONALE Date

Stuart A. Clark Air Quality Program Manager Washington State Department of Ecology

Date

Ï

2

### ATTACHMENT 1

### **Rock Crusher Fugitive Dust Control Plan (FDCP)**

Ecology's Air Quality Program has developed emission control guidelines to supplement General Order No 11-AQG-001. Washington air quality regulations require Best Available Control Technology (BACT) to control air emissions from both fugitive and process emission points. The guidance provided below will identify emission points and provide a menu of options to control both process and fugitive particulate matter emissions for a rock crusher and associated activities.

### 1. FUGITIVE EMISSION POINTS

#### 1.1. Materials handling

- 1.1.1. Front-end loader dumping into aggregate bins
- 1.1.2. Surface mining and loading the primary (jaw) crusher
- 1.1.3. Loading aggregate trucks with conveyor and/or front-end loader
- 1.1.4. Aggregate and/or waste being added to and/or removed from stockpiles
- 1.2. Wind erosion from exposed surfaces
- 1.3. Access roads and site vehicle access areas
- 1.4. Paved roads (carryout, spillage)
- 2. PROCESS EMISSION POINTS

Plant equipment configurations will vary, but all rock crushers will contain the following equipment.

- 2.1. Conveyors: primary emission point for a conveyor is the drop distance for each transfer point.
- 2.2. Crushers
- 2.3. Screens
- 3. EMISSION CONTROL OPTIONS
  - 3.1. REQUIRED: Water truck to be on site at all times the crusher is in operation, unless the water truck is obtaining water or other arrangements have been made with the permitting

agency. The following factors should be considered when applying water to access roads and on-site vehicle access areas.

3.1.1. Application rate: amount of water applied per unit area

3.1.2. Frequency: time between applications

3.1.3. Vehicles per hour

3.1.4. Weather conditions

3.2. REQUIRED: Either a pressurized line water supply or water storage tank must be located on-site at all times the crusher is in operation. The water storage tank is in addition to the water truck, and the water truck cannot be used as the water storage tank, unless there are multiple water trucks onsite. Water application systems are required to be readily available on the crusher whenever it is in operation. The system shall include a pump, water lines, spray bars, or equivalent, available to be deployed on all crusher discharge points and before all fines drop points. Water application systems need to be installed at any discharge point generating visible emissions. The water application rate will be dependent on the operating capacity and type of material per hour passing through each control point, and the ability to keep visible emissions below 10 percent opacity. The following factors should be considered when applying water to process control points:

3.2.1. Application rate: amount of water applies per ton per unit time (gals/ton/time)

3.2.2. When to apply

3.2.3. Weather conditions

3.2.4. Coverage area for each spray bar or nozzle

- 3.3. REQUIRED: Speed limitations for site vehicles with procedures to maintain and enforce speed restrictions.
- 3.4. RECOMMENDED: Location, size, and configuration of stockpiles to reduce wind erosion.
- 3.5. AS NECESSARY: Dust suppressant
  - 3.5.1. Type and amount of suppressant applied per unit area of roadway (gals/square foot)
  - 3.5.2. Frequency of application (time between applications)
  - 3.5.3. Traffic volumes (vehicles per hour)

# 3.5.4. Weather conditions

3.6. AS NECESSARY: Mechanical cleaning (i.e., sweeping paved surfaces)

3.6.1. Cleaning equipment or method

3.6.2. Cleaning frequency

3.7. AS NECESSARY: Vegetation reclamation

3.7.1. Type of vegetation

3.7.2. When and how planted

3.7.3. Pounds of seed or shrub/tree per acre

3.7.4. Watering system

3.8. AS NECESSARY: Wind Erosion Response Plan

The fugitive and process emission points and control options described above pertain to a rock crusher and associated activities. Ecology requires that visible particulate matter emissions be controlled to less than 10 percent opacity. No visible emissions from the crusher or any associated activities can cross the boundary of the property on which crusher is located.