

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.