

APPENDIX E-3

## **Proposed Fugitive Dust Control Plan**

---

## **PROPOSED BINGHAM CANYON MINE FUGITIVE DUST CONTROL PLAN MEASURES**

### **1.0 Introduction**

In compliance with the NOI submitted to the Utah Division of Air Quality on August 17, 2010 (proposal to modify Bingham Canyon Mine Approval Order DAQE-AN0105710023-08) and R307-309, the following report describes dust control measures proposed for the Bingham Canyon Mine.

### **2.0 Proposed Dust Control Measures**

- Total material moved of ore and waste rock combined at the mine shall not exceed 260,000,000 tons under the AO.
- Maximum daily total mileage for ore and waste haul trucks shall not exceed 30,000 miles.
- Primary ore and waste haul truck fleet shall have a minimum design payload of 240 tons and a maximum of 6 wheels each.
- Mine waste dumps to not exceed a height of 1,000 feet.
- Active ore and waste haulage roads within the Pit Influence Boundary (see attached map) shall be water sprayed and/or treated with commercial dust suppressant as conditions warrant. Additionally, crushed road base material shall be applied as necessary to active ore and waste haulage road within the Pit Influence Boundary to enhance the effectiveness of fugitive dust control measures.
- Commercial dust suppressant shall be applied to active ore and waste haulage roads outside of the Pit Influence Boundary (see attached map) no less than twice per year.
- Use of 5-mile ore conveyors, reduces fugitive emissions by displacing transport by truck.
- Integration of higher capacity haul trucks results in a decrease in round trips and vehicle miles travelled reducing fugitive emissions.
- KUC shall report annually volume of water applied, commercial dust suppressant activity, road base placement, and dust suppression fleet composition.

### **2.1 Active Haul Roads**

Opacity surveys from haul roads shall be conducted as specified in the Bingham Canyon Mine AO. If observations are determined to be in excess of those allowed by the AO, dust control measures will be implemented.

#### **Within Pit Influence Boundary:**

Dust control measures proposed at the Bingham Canyon Mine include continued water application on active ore and waste haul roads within the Pit Influence Boundary, as governed by continual monitoring of road and meteorological (dry) conditions. A portable road base crushing and screening unit has been permitted, tested and operating since October 2006 to crush road base material. Based on testing and application of the road base material, results observed general road quality and surfaces improved while reducing fine particulate matter. Rock is screened to approximately 2-inch diameter during winter months and to 1.5-inch diameter for the remainder of the year. KUC will continue to operate the road base crusher and place material as necessary on haul roads within the Pit Influence Boundary. KUC will annually report roads that received road base application.

### **Outside Pit Influence Boundary:**

Commercial dust suppressant shall be applied on active ore and waste haul roads outside of the Pit Influence Boundary no less than two times per year. The attached Pit Influence Boundary map details these areas.

The crushing and conveying department will continue to water roads along the conveyor as conditions warrant. In addition, the crushing and conveying department at the Copperton Concentrator utilizes a 4,000 gallon capacity water truck which is primarily dedicated to dust control measures associated with the conveyor belt between the mine and the ore stockpile.

### **2.2 Active Access Roads**

Continued use of commercial dust suppressant is planned for unpaved access roads that receive minimal haul truck traffic and elevated light vehicle traffic. The application of the commercial dust suppressant will be through the use of contractors as in previous years and under close KUC operations supervision. The dust suppressant may be reapplied as necessary.

### **2.3 Dust Suppression Fleet**

The active dust suppression fleet will consist of:

- Five (5) 50,000 gallon trucks (two 58,500 gallons and three 52,000 gallons)
- Two (2) 4,000 gallon trucks (one 4,000 gallons and one 3,600 gallons)
- One (1) 1,800 gallon truck

KUC uses graders to perform road maintenance as well as other operational functions. The number of graders used for road maintenance at any given time varies as road conditions warrant. Experience has determined that rapid removal of mud slurry after a storm event eliminates a saturation source for the road base and also helps to ultimately reduce fugitive emissions caused when the slurry dries. In this effort the mine uses 90-ton trucks as road service vehicles to haul the mud off the haul road and import new road surface material. A loader is used to load the 90-ton trucks.

The five (5) 50,000 gallon capacity water trucks are outfitted with a GPS computerized tracking system to provide an accurate count of ready down, standby and delay hours on each truck. That data is recorded and used to calculate the number of water loads each truck applies per month. The three smaller trucks (4,000 gallon, 3,600 gallon and 1,800 gallon) will be primarily dedicated to areas of drilling and blasting but will also apply water on smaller access roads that are too narrow for the large capacity water trucks to reach and trafficked by light vehicles.

### **2.4 Waste Rock Disposal Areas**

Opacity surveys will be conducted monthly in areas where waste rock is being dumped. The observation shall be conducted in accordance the Bingham Canyon Mine Approval Order. If the average of the three minute trigger opacity readings described in the AO are determined to be in excess of those allowed, control measures such as dumping and pushing with dozers, or wetting with water will be implemented in order to maintain compliance.