

APPENDIX A

PROPOSED TAILINGS SITE FUGITIVE DUST CONTROL MEASURES

1.0 Introduction

In compliance with the NOI submitted to the Utah Division of Air Quality in December 2011 (proposal to modify Tailings site Approval Order DAQE-AN0572018-06) and R307-309, the following describes dust control measures proposed for the Tailings site.

2.0 Proposed Dust Control Measures

- On the Tailing Impoundment, KUC shall conduct monthly wind erosion potential inspections between February 15 and November 15.
- Between February 15th and November 15th of each calendar year, KUC shall inspect the unpaved roads, impoundment, and embankment areas once every two weeks.
- No more than 50 contiguous acres or 5% of the Tailings facility shall be permitted to have wind erosion potential. If wind erosion potential is greater than 5% then inspections shall be conducted every 5 days until wind erosion potential is equal to or less than 5%.
- The access roads shall be water sprayed and/or treated with commercial dust suppressant as conditions warrant.
- Visible emissions caused by fugitive dust shall not exceed 10% at the property boundary and 20% onsite except during periods of high winds.

2.1 Access Roads

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

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 commercial dust suppressant may be reapplied as necessary.

The average speed shall be limited as appropriate on the roads at the Tailings site.

2.2 Tailings Impoundment

A peripheral discharge system will be used along the perimeter of the Impoundment to control dust emissions from the surface. Except during extremely cold weather, during pipeline relocation, and during periods of upset conditions, the system will distribute tailings not used for embankment construction across the entire surface of the impoundment to maximize surface wetness.

The minimum cycle time required for wetting all interior beach areas between February 15 and November 15 shall be at least every four days.

The tailings distribution system shall be operated to maximize surface wetness.

On the Tailing Impoundment, KUC shall conduct monthly wind erosion potential inspections between February 15 and November 15. KUC shall also inspect the impoundment at least once every two weeks.

Single point discharges will be utilized to deposit tailing during freezing conditions, pipeline relocation, and periods of upset conditions.

2.3 Tailings Embankment Cells

The embankment shall be constructed during nonfreezing months. Embankment construction shall be sequenced to maintain the embankment surface above the interior of the impoundment. The tailings embankment is constructed utilizing underflow sand produced at cyclone stations. The underflow shall be deposited into hydraulic deposition "cells", where the material is decanted, spread, and compacted in lifts. These cells are referred to as active cells.

As the embankment cells are filled during continual raising of the embankment, dust shall be controlled by the inherent high water content of the hydraulically placed cyclone underflow. Portions of the embankment that are not under active construction shall be kept wet or tackified by applying chemical stabilization agents or water pumped from the toe ditch.

No more than 50 contiguous acres or 5% of the tailings facility shall be permitted to have wind erosion potential. If wind erosion potential is greater than 5% then inspections shall be conducted every 5 days until wind erosion potential is equal to or less than 5%.

Automated sprinklers shall be installed to keep the inactive cells wet. The automated sprinklers wet the surface at regular intervals.

To prevent dust generation from the exterior embankment slopes, the surface shall be sprayed with a polymer dust suppressant agent as necessary so that the dust suppressant maintains its effectiveness. Newly raised slopes shall be planted with a rapidly growing cereal grass by including seed in the tackifier application. If the slope is still exposed the following year, another seeding pass shall be made to overplant. Polymer shall be used in areas where vegetative growth is insufficient to control dust.

Between February 15th and November 15th of each calendar year, KUC shall inspect the embankment at least once every two weeks.

2.4 Construction Activities

Fugitive dust emissions from construction activities shall be minimized by the use of water, commercial dust suppressants, or others. Activities include, but are not limited to, drainage blanket construction, toe ditch construction, delivery system expansion and rerouting of utilities.