



The Alaska-Juneau Gold Mine Project

Abstract

The U. S. Environmental Protection Agency (EPA) is proposing to exempt from existing EPA effluent guidelines (40 CFR Part 440, Subpart J) dewatered tailings generated by the Alaska-Juneau (A-J) gold mine project near Juneau, Alaska. EPA is proposing this exemption based on the results of a preliminary review of the technology basis for the existing regulations that appear to show that, because of the severe topographic and climatic conditions that exist at the A-J site, the use of a tailings impoundment is impractical. If constructed, the tailings impoundment may result in long-term environmental degradation.

Background

Impoundments, or "tailings ponds," are used by the mining industry primarily to dispose of mine ore tailings and to remove suspended solids from the wastewater prior to its discharge to surface waters. They must be large enough to provide sufficient retention time so that settling can take place and hold the settled solids. Ponds are designed to permanently hold the mill tailings and also contain all runoff from rain or snow that falls in the drainage area.

The A-J Site

Much of southeastern Alaska, where the A-J site is located, consists of highly mountainous terrain characterized by glacially carved valleys with avalanche chutes and steep rocky slopes. In an attempt to comply with existing regulations, the facility would be required to construct a tailings pond that would extend the width of Sheep Creek Valley to a height of 345 feet. The impoundment would encompass 420 acres of the 540 acre valley. The impoundment size was made necessary in part because of the volume of tailings generated (over 100 million tons) during the life of the project and by the inability to divert runoff and stream flow using common practices.

EPA's Proposal

The use of impoundments was an important component of the technology basis of existing regulations at 40 CFR 440, Subpart J. Based on EPA's preliminary review of existing regulations, the site conditions (i.e., the extreme climate and topography of the area), and the size of the project, it appears infeasible to divert natural stream flow and runoff around any impoundment that might be constructed at the site. As a result, an extraordinary amount of runoff would flow into the impoundment which would make it

impracticable to treat the mill tailings. In addition, construction of a massive tailings impoundment may result in long-term environmental degradation and there are safety concerns with a pond of this size. Thus, EPA questions whether the requirement of the existing regulations should be applicable to the project.

This proposal opens the way for the detailed evaluation of certain alternatives for treatment of the tailings from the project that are not allowable under the current regulations. EPA will evaluate all comments and information received prior to making a final determination, which the Agency currently expects to do by the end of 1996.

Comments

Comments on the proposal must be submitted to EPA in accordance with the time schedules that are published in the *Federal Register*. Comments may be submitted during a 60-day comment period and comments concerning technological alternatives for the A-J project site may be submitted during a 180-day comment period. A series of public meetings concerning the exclusion of dewatered tailings is being planned for the Spring of 1996 during the extended comment period. The times and locations of these meetings will be noticed in the *Federal Register* and local newspapers when they are finalized.

Further Information

For additional information, you may contact Ronald G. Kirby, Telephone Number: 202-260-7168; Facsimile Number: 202-260-5394. The entire *Federal Register* notice may be viewed on the Internet at <http://www.epa.gov/EPA-WATER>. The notice contains detailed information on how the public can comment on this proposed action.

