Bonita Peak Mining District

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY • REGION 8 • NOVEMBER 2016

EPA Announces Public Release of Engineering Evaluation and Cost Analysis (EE/CA) and 30-day Public Comment Period

Introduction:

Since October 2015, the U. S. Environmental Protection Agency (EPA) has been treating the discharge from the Gold King Mine at the Interim Water Treatment Plant (IWTP) at Gladstone, Colorado. As EPA continues to treat this discharge, it conducted an evaluation for continuing operations of the IWTP at Gladstone beyond this year. EPA's Engineering Evaluation and Cost Analysis (EE/CA) is now complete and available, along with supporting documents, for public review and comment. The public comment period runs from **November 14 through December 14, 2016.** EPA's preference is to continue operations of the IWTP as currently configured while it evaluates longer-term options to address water quality issues in Cement Creek as part of the Bonita Peak Mining District Superfund site remedial action.

Engineering Evaluation and Cost Analysis:

If EPA decides, after reviewing comments on the EE/CA, that continued operation of the IWTP is warranted, EPA will prepare and sign a Non-Time Critical Removal Action (NTCRA) Action Memo that will transition the IWTP operation from the emergency removal action to a NTCRA. The EE/CA analyzes the effectiveness, implementability and cost of continuing to operate the IWTP, as presently configured, against ceasing operation of the IWTP and mothballing the IWTP for potential future use.

The results of the EE/CA and EPA's response decision will be summarized in an Action Memorandum. EPA will address all significant public comments in a responsiveness summary appended to the Action Memorandum.

Remedy Alternatives:

The Contaminants of Potential Ecological Concern (COPECs) in the surface water in the mainstem of Cement Creek include pH, aluminum, beryllium, cadmium, copper, iron, lead, manganese, silver, and zinc (from *Final Draft Baseline Ecological Risk Assessment: Upper Animas Mining District, San Juan County, Colorado).*

The Response Action Objective (RAO) is to reduce the mass of surface water COPECs and total suspended solids in mine water in discharge from the Gold King Mine adit using the existing removal action infrastructure (i.e., the IWTP).

The two alternatives that were evaluated in the EE/CA to achieve the RAO are:

- Alternative 1: Continue operation of the existing IWTP as currently configured.
- Alternative 2: Suspend operation of the existing IWTP for treatment of Gold King Mine adit water discharge.

EPA's preferred response action alternative is Alternative 1: Continue operations of the IWTP as currently configured while it evaluates longer-term options to manage water quality in Cement Creek as part of the Bonita Peak Mining District Superfund site remedial action. However, before making a final decision regarding continued operations of the IWTP, EPA will consider all comments received during the public comment period.

Background:

Beginning in the 1880s, the Silverton, Colorado area was home to many mines extracting gold, silver, lead, and copper until operations ceased in the early 1990s. Following inadequate and incomplete closures of mines by various mine owners and operators, EPA and Colorado began assessing the area to reduce metals loadings associated with acid drainage into the Animas River Watershed.

On August 5, 2015, an EPA team investigating the Gold King Mine as a source of metals inadvertently triggered a release of 3 million gallons of acidic, mine-influenced waters. These waters had been trapped by the collapsed mine structure and rock blocking the opening (or adit) of the mine, damming the water behind the collapse and causing the waters to become pressurized. Over eight days, the plume from the release flowed down the Animas River to the San Juan River.

By August 10, 2015, EPA finished the construction of a series of settling ponds to treat the metal-laden water discharging from the mine. Lime was added to the ponds to raise the pH of the acidic water so that the metals of concern became insoluble and formed a sludge that settled in the ponds.

To enhance treatment of the routine discharge from the mine, EPA installed a $1.5 million portable IWTP in Gladstone, Colorado, approximately 10 miles north of Silverton. The interim treatment plant is designed to manage up to 1,200 gallons per minute of mine discharge and treat it by removing solids and metals. EPA has sampled and analyzed the untreated (influent) and treated (effluent) mine water monthly since the plant was installed to ensure the plant is performing properly.

Gold King Mine Interim Water Treatment Plant

EE/CA Public Comment Period

The EE/CA and supporting documents can be viewed at the information repositories identified below or online in the following administrative record collection:

Bonita Peak Mining District, Gladstone Interim Water Treatment Plant, NTCRA Action Memo

The 30-day public comment period will run from **November 14 through December 14, 2016.**

Silverton Library
1117 Reese Street, Silverton, CO 81433

Durango Public Library
1900 East Third Avenue, Durango, CO 81301

EPA Superfund Records Center
To request copies of administrative record documents, please call:
(303) 312-7273 or
(800) 227-8917 ext. 312-7273 (toll free Region 8 only)

For more information, visit www.epa.gov/superfund/bonita-peak

Please send comments to:
Cynthia Peterson, Community Involvement Coordinator
U.S. EPA Region 8
1595 Wynkoop Street (8OC-PAI)
Denver, CO 80202
peterson.cynthia@epa.gov