



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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Ref: 8EPR-ER

Date: April 5, 2017

TECHNICAL MEMORANDUM

SUBJECT: Mine Site Category Determination for Fiscal Year 2017 Planned Activities at the Jumbo Mine Site, Summit County, Colorado

FROM: Paul Peronard, On-Scene Coordinator (OSC)

THRU: Laura Williams, Emergency Response Unit Leader

TO: The File

This memorandum is written to the file as documentation of the Mine Site Category determination required by the EPA Headquarters' memorandum (Woolford and Cheatham) dated April 4, 2017.

The Jumbo Mine Site is a relatively small set of mine works located adjacent to Peru Creek approximately 2 miles upstream of Peru Creek's confluence with the Snake River. There is just a single adit with a collapsed portal that drains fairly neutral pH mine water at rates varying from 5 to 50 gpm. Water quality exiting the collapsed portal, although elevated in zinc and copper, would not warrant an intervening Removal Action. However, the mine drainage currently flows directly on top of a mine rock waste pile that is approximately 25,000 cubic yards in volume. This discharge actively erodes the waste rock pile and also has part of the flow leaching through the pile. Water samples from the toe drainage of the pile show a significantly increased concentration of heavy metals along with a corresponding drop in pH. In a Watershed Plan updated in May 2013, the Snake River Watershed Coalition identified the Jumbo Mine as the third priority mine site along Peru Creek. Previous Removal Actions have addressed the top two priorities in the Peru Creek drainage. No work has been done to date to open up and explore the inner works of the Jumbo Mine. As such the **Jumbo Mine is a Category 2 Site, as determined using Attachment 1 to the referenced Headquarters' Memorandum.**

For 2017, the EPA Region 8 Removal Program, in consultation with the Colorado Division of Remediation and Mining Services (DRMS) and the Snake River Watershed Coalition, plans the following: 1. Adit water discharging out of the collapsed portal will be routed to the west of the waste pile in a constructed, lined channel through a lime rock matrix. 2. A toe drain, also lined and filled with lime rock, will be constructed along the base of the waste pile and connected to the west drain. 3. The combined flow will be routed for discharge into Peru Creek. 4. The waste pile will undergo a slight regrading effort and then will be covered with an evapo-transpirative soil cap with appropriate

vegetation. No work will be done to the Jumbo Mine adit. **Therefore, the Jumbo Mine work would be considered a Sub-Category “2N” site where “the region’s planned activities will not affect or change the mine’s fluid release hazard” as described in Attachment 1.**

Due to the 2N sub-category determination for the Jumbo Mine Site, no consultation with Headquarters is required prior to initiating the planned activities for 2017 described above.