

Bonita Peak Mining District Update

November 2017



COLORADO
Department of Public
Health & Environment



Recent Activities

In 2007, through a cooperative agreement between the Colorado Division of Reclamation, Mining and Safety and the Bureau of Land Management (BLM), two mine waste piles from the lower Joe & John Mine were removed and relocated into the nearby Lark Mine repository. Since then, the Joe & John adit grate became partially plugged with dirt and debris. In October 2017, BLM removed the material blocking the adit grate and cleaned out the channel leading from the adit to the drainage culvert. This is the first of several operation and maintenance (O&M) projects BLM has planned at previously completed sites within the BPMD.



Adit grate and drainage channel at Joe & John Mine



Well monitoring

During the week of November 6th, 2017, members of the BPMD team completed the last of the field activities for the fall season by sampling a monitoring well near Gladstone. The team also enjoyed the opportunity to meet with representatives from the San Juan Historical Society, where they spent time sorting through the maps in the archive's collection.

The monitoring well is in the North Fork of Cement Creek and the information collected will provide insights into the Bonita Peak groundwater system. Samples will be analyzed for total and dissolved metals as well as alkalinity, anions, and stable isotopes of water. These results will be compared to surface water samples from the nearby mines, seeps, springs and streams.

EPA's Superfund Program at BPMD

EPA has two authorities within the Superfund program that the Agency can use to conduct response actions at the BPMD. Response actions taken under removal authority are typically implemented in the near-term and over a short period of time. They are intended to protect people and the environment from immediate threats or actual exposure from hazardous substances. These responses are generally interim in nature and intended to contribute to the longer-term, site-wide cleanup. Response actions taken under remedial authority are typically longer-term cleanups that comprise a permanent solution to the release of hazardous substances.

These two authorities are used, as appropriate, to advance progress at Superfund sites like the BPMD. In fact, the EPA's Superfund Task Force recently recognized the value of this approach by recommending that the agency expedite Superfund cleanups through increased use of its removal authority at NPL sites.

EPA's removal authority was used in numerous response actions conducted in the mining district prior to the addition of the site to the National Priorities List, and it is now being used as an integral part of the BPMD cleanup. The work undertaken under the removal authority will help the Site Team better understand the nature and extent of contamination in the BPMD, reduce the risk of future uncontrolled releases, and decrease metals loading into surface water.

Some of the work taken under removal authority this year includes:

- Installing a new valve on the Red and Bonita pipeline that directs adit flow away from the waste rock pile and reduces the contaminant load from the mine to Cement Creek.
- Drilling a horizontal well, installing a flow control structure and constructing an earthen berm to reduce the potential of an uncontrolled release from the Gold King Mine.
- Installing a new pressure gauge in the Mogul Mine bulkhead.
- Completing adit repairs and conducting a bulkhead inspection at the American Tunnel.
- Installing five new monitoring wells (piezometers) in the area of the Howardsville tailings to better understand the groundwater system at that location.

2017 Priorities for Superfund Site Work

Early Actions – initiate interim response actions to address simple water management and waste pile stability concerns.

Stability – identify for future action those mine features that may be the most unstable and at risk of unplanned releases of contamination.

Significant Sources – identify for future action mine features with relatively high contributions of contamination.

Human Health – conduct a Human Health Risk Assessment.

Meet the Bonita Peak Site Team

Natasha Davis, EPA Remedial Project Manager



Natasha joined the BPMD team with a focus on coordinating cultural resources investigations. She has worked for the EPA Region 8 for the past eight years; six as an inspector and enforcement coordinator under the Clean Water and one year as Tribal Program Manager for both the Oglala Sioux Tribe and the Crow Creek Sioux Tribe. Natasha began her current role as a Project Manager in the Superfund Federal Facilities Program earlier this year. This oversight role of the Department of Defense has provided the opportunity to investigate the groundwater contamination at several Air Force bases in Utah, South Dakota, and Wyoming. She also leads the Region's chapter of the Federal Women's Program. Natasha enjoys hiking, trail skiing and brewing a variety of beverages.

New on the Web

- Digging Deeper at Bonita Peak: Terrestrial Risk Assessment <https://semspub.epa.gov/src/document/08/100001975>
- Digging Deeper at Bonita Peak: Aquatic Risk Assessment <https://semspub.epa.gov/src/document/08/100001976>
- Bonita Peak Mining District Update, October 2017 - Spanish (Novedades del distrito minero Bonita Peak, Octubre de 2017) <https://semspub.epa.gov/src/document/08/100002032>

More Information

Visit the Bonita Peak Mining District website <http://www.epa.gov/superfund/bonita-peak>.