

Bonita Peak Mining District Update

August 2020



COLORADO
Department of Public
Health & Environment



<https://www.epa.gov/superfund/bonita-peak>

Site Updates

■ Red and Bonita Bulkhead Test

The Red and Bonita bulkhead test started on July 15, 2020. The pressure has been raised to approximately 160 feet as of August 27, 2020. Bulkhead pressure has been rising at a rate of approximately 3 ft/head per day since closing the valve on July 20 but has slowed to approximately 2 ft/head per day since August 10. The bulkhead and surrounding structures are continuing to be monitored regularly. Minimal seepage continues to be seen around the bulkhead, with flows totaling 2.6 gpm to 3.6 gpm. Surface water sampling within Cement Creek occurred on August 3, and weekly inspections of nearby seeps and springs, draining mines, and dry mines continues to occur. Given the current rate of head rise behind the bulkhead, the team anticipates that the holding time at 200 ft will need to be shortened.

At the end of the test, the water that has accumulated behind the bulkhead will be drawn down and fully controlled at the bulkhead valve and be treated at the Interim Water Treatment Plan (IWTP).

■ Sludge at the Interim Water Treatment Plant

EPA continues to review dewatering methods for the IWTP sludge to make transportation, handling, and storage of that sludge more efficient. For three months this summer, EPA is trying out a large tractor specifically designed for sludge. The tractor, rented from Brown Bear Corporation, has a large auger on the front which mixes and windrows the sludge. This turning process exposes more of the sludge to the air and sun accelerating the drying process. EPA is trying the equipment out on its sludge drying pad just below the treatment plant. The overall goal is to remove water from the sludge. By reducing the water content, the volume of the sludge decreases making it more cost effective to transport and manage at a later date. EPA will evaluate the tractor's effectiveness after three months.



Figure 1 Brown Bear Corp. tractor with auger

■ United States Forest Service Brooklyn Mine Work

Starting mid-September, the USFS will start work at the Brooklyn Mine. The Brooklyn Mine site consists of four mining levels, termed level one through four. The USFS will work with Colorado Division of Reclamation, Mining and Safety (DRMS) to complete the following site work:



Figure 2 Brooklyn Mine waste rock pile and levels 1 and 2 adit area. Credit USGS

- *Construction of diversion controls.* Run-on control work in the Level One area and in the area of the quarry road, located at the entrance of Level One, will be completed to divert surface water away from waste rock piles below those areas. The existing road to the quarry location will be repaired to implement, maintain, and monitor run on controls that will divert water away from waste rock below the road. This work will be conducted pursuant to the 2019 Interim Record of Decision (IROD).
- **Additional Hazard Mitigation and Debris Removal**
 - *Safeguard Level One highwall.* Interim restoration will be completed at the Level One adit area to address highwall areas created by portal collapse in a popular backcountry skiing and hiking area by lessening the slopes and removing unstable rock and tree hazards at the collapsed portal area.
 - *Remove trash.* Trash and debris from around the Brooklyn site will be removed to an approved landfill, including scrap metal and the grey corrugated metal building.

■ Natalie/Occidental IROD Work

Site work began on the Natalie/Occidental source area this month. Crews are re-routing the adit discharge away from the waste pile to eliminate erosion and undercutting of the waste pile from the current channel. The portal grate will also be cleared of debris buildup behind the grate to prevent back up of mine discharge and to ensure unobstructed flow to the drainage channel. Figure 3 shows crews creating the new lined channel for adit discharge.



Figure 3 Before IROD work (left) and channel being created to divert adit discharge around waste pile (right)