

1. Incident Name	2. Operational Period	INCIDENT BRIEFING ICS 201 - EPA
Camp Bird Mine (A8H9)	September 11-18, 2017	
<b>3. Site Description</b>		
<p>The Camp Bird Mine (Site) is located 6 miles south of Ouray, Colorado in Ouray County. It contains three large tailings piles that are being actively eroded by three perennial streams (Sneffels Creek and Imogene Creek enter the Site and combine in the middle of the tailings to form Canyon Creek). The tailings are also susceptible to flood events, increased runoff and/or the failure of the existing slopes.</p> <p>The two historic tailings piles on the south side of Canyon Creek are associated with milling activities dating back to the early 1900s. The historic pile further downstream is bisected by a side channel that flows into Canyon Creek. A third modern tailings pile located on the north side of Canyon Creek and was last used for disposal in the late 1990s. This modern pile is located within an active mining permit boundary administered by the Colorado Division of Reclamation, Mining and Safety (DRMS).</p> <p>In August, 2017 Caldera Mineral Resources purchased the property and signed an Administrative Order on Consent with EPA and the State of Colorado to perform work that prevents the downstream migration of the tailings deposits. This work will be conducted in two phases. Phase 1 will address all work in the creeks and the historic tailings and is being conducted as an EPA Time-Critical Removal Action under the direction of a Federal On Scene Coordinator (OSC). Phase 2 will address stabilization of the modern tailings through modification of the existing DRMS mining permit.</p> <p><a href="#">Webmap</a> <span style="float: right;"><a href="#">Website</a></span></p>		
<b>4. Current Situation:</b>		
<p>EPA and Caldera have initiated Phase 1 and response operations are currently focused on stabilization of the downstream historic tailings pile, removal of obstructions in Canyon Creek, reconstruction of Imogene Creek and obtaining restoration materials.</p> <p>Local stakeholders have requested that a) restoration materials not be trucked through Ouray and b) CR 361 not be improved to obtain these materials. Specific emphasis has been place on the collection of rock and soil on site. Potholes and deep ruts were filled in at the entry to the mine and between the historic buildings to better contain on-site traffic. No additional locations on CR 361 will be improved at the direction of the OSC without prior notification being made to the County. On-site operations will pause for the season when the road is closed for the winter season.</p> <p>Response operations include using controlled explosives to construct a drainage channel around the lower historic tailings, remove a large obstruction in Canyon Creek and generate rock to be used as restoration materials. The team is also segregating rock and soil on-site.</p> <p>The team is using heavy machinery in Imogene Creek during this operational period to address operational tactics: pulling contaminated material back away from the stream, sculpting the channel to account for a variety of flow regimes, armoring the lower banks and constructing flow control structures directly in the stream. Stakeholders and the public should expect the release of greyish sediments.</p>		
<b>5. Response Operations</b>		
<p><b>Objective 1. Stabilize the downstream historic tailings pile.</b></p> <p><u>Ongoing Activities</u></p> <ol style="list-style-type: none"> <li>a. Construct and armor a drainage channel along the uphill perimeter of the tailings pile to capture and divert the bisecting channel and other runoff around the tailings.</li> <li>b. Excavate the upper roughly one-fourth portion of the tailings pile east of the bisecting channel and place this material into the void of the bisecting channel.</li> </ol>		

- c. Continue this constructed drainage channel around the newly formed southeast slope of the tailings cell and downhill into the natural drainage east of the tailings.
- d. Regrade the remaining slopes and fill any remaining void of the bisecting channel with waste materials generated on-site.

Planned Activities

- e. Construct erosion control features across the surface of the pile.
- f. Cover the surface of the pile with hydro mulch, topsoil and/or compost and establish vegetation.

**Objective 2. Stabilize the upstream historic tailings pile.**

Planned Activities

- a. Regrade the slopes of the tailings pile and construct erosion control features.
- b. Cover the surface of the pile with hydro mulch, topsoil and/or compost and establish vegetation.

**Objective 3. Stabilize the stream channels.**

Ongoing Activities

- a. Remove the large boulder obstruction from Canyon Creek and thin the trees immediately upstream.
- b. Excavate, widen and reconstruct Imogene Creek from the pipe bridge downstream to the permitted river crossing.
- c. Armor stream banks, construct erosion control features and establish vegetation in the constructed floodplain.

Planned Activities

- d. Reconstruct the permitted river crossing.
- e. Excavate, widen and reconstruct the confluence of Imogene and Sneffels creeks.
- f. Excavate, widen and reconstruct Imogene Creek from the permitted river crossing to its confluence with Sneffels Creek.
- g. Excavate, widen and reconstruct Sneffels Creek from the CR361 bridge to its confluence with Imogene Creek.
- h. Excavate, widen and reconstruct Canyon Creek from the confluence of Imogene and Sneffels Creeks to a point downstream of the historic tailings.

**4. Obtain restoration materials.**

Ongoing Activities

- a. Estimate the type, quantity and source of required restoration materials including rock, topsoil and other cover material.
- b. Harvest or generate restoration materials on site.