

Site Update

Silver Dyke Adit and Drainage Site

Operational Period 4

August 7 - 13, 2023

Site Description

The Silver Dyke Mine Adit and Drainage Site is located within Operable Unit 3 (OU3) of the Carpenter-Snow Creek Mining District National Priorities List (NPL) Site (CSCMD Site), near the Town of Neihart, Cascade County, Montana. This emergency response includes initial activities to address severe erosional damage to the area around and down drainage of the Silver Dyke Mine adit that was caused by a high level of snowmelt followed by extremely heavy rains this past Spring.

Announcements

Occasional sediment releases and water discolorations resembling rainfall runoff in the drainage between the Silver Dyke adit and Carpenter Creek are anticipated during EPA's construction activities. Due to rain events and wet conditions, work paused during this operational period and resumed as soon as conditions were dry enough to continue.

Site Goals

Goal 1: Improve water management and erosion control.

- a. Divert water away from the drainage above the adit **(complete)**.
- b. Stabilize the slope above the adit to support construction **(complete)**.
- c. Complete stabilization of the slope above the adit **(in progress)**.
- d. Upgrade the bridge/water crossing at Carpenter Creek.
- e. Restore disturbed areas.
- f. Repair the toe of the two large fluvial tailings ponds.

Goal 2: Open and stabilize the Silver Dyke Adit.

- a. Prep the "Glory Hole" to receive waste **(complete)**.
- b. Remove waste rock from below the adit to the Glory Hole **(complete)**.
- c. Construct containment ponds below the adit **(in progress)**.
- d. Provide a stable flow channel for the adit drainage **(in progress)**.
- e. Conduct geophysical surveys **(in progress)**.
- f. Prep drill site above the adit.
- g. Drill into and drain the adit.
- h. Remove material blocking the adit to the Glory Hole.
- i. Install structure to keep the adit open and draining.
- j. Remove containment ponds.

Operational Period Objectives

The following were the Objectives for this past Operational Period:

1. Continue hauling waste rock from below the adit to the Glory Hole.
2. Continue harvesting rock for use on drainage controls.
3. Prepare for geophysical investigations

Operational Period 4 Accomplishments

1. 2,190 yds³ of waste rock from below the adit was moved to the Glory Hole. This material was removed to create space for a large water management pond that will be constructed to support the opening of the adit. Approximately 8,820 yds³ of waste rock have been moved to date.
2. A survey team conducted mobile mapping and collecting GIS information to support the upcoming geophysical investigations.
3. Additional erosion control measures were taken during several rainfall events.
4. Additional rock to being used for drainage control was harvested.

PLANNED ACTIVITIES

For the Operational Period 5, August 14 - 20, 2023, the following operations are planned:

1. Continue to stabilize the slope above the adit.
2. Begin construction of two water management ponds below the adit.
3. Begin construction of a stable flow channel for the adit drainage.
4. Begin geophysical investigations of adit conditions.
5. Other Site management tasks:
 - a. Continue road maintenance and erosion control work.
 - b. Continue to harvest rock for use on drainage controls.

For additional information please visit the EPA Silver Dyke Adit and Drainage Site Response page: <https://response.epa.gov/silverdykeadit>



Excavating mine waste to create a water management pond, looking up towards the adit.



Water management pond creation.



Slope stabilization below adit where EPA is working. Logs are being added for slope stability.