

# Site Update

## Silver Dyke Adit and Drainage Site

### Operational Period 7

August 28 – September 3, 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

EPA anticipates occasional sediment releases and water discoloration resembling rainfall runoff in the drainage between the Silver Dyke adit and Carpenter Creek during EPA's construction activities.

#### 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 (**complete**).
- 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 (**one complete, one in progress**).
- d. Provide a stable flow channel for the adit drainage (**complete**).
- e. Conduct geophysical surveys (**complete**).
- f. Prep drill site above the adit (**in progress**).
- 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 (**structure purchased**).
- j. Remove containment ponds.

#### Operational Period Objectives

The following were the Objectives for this past Operational Period:

1. Complete the work to stabilize the slope above the adit.
2. Complete the second containment pond below the adit.
3. Continue building stable flow channel for the adit discharge.
4. Continue road improvement, run on/off and erosion control work.
5. Continue to harvest rock for use on drainage controls.
6. Other Site management tasks.

## **Operational Period 7 Accomplishments**

1. The cover and drainage channels are complete. A diversion berm along the road above the slope has been upgraded. This work is complete.
2. The culverts for the upper pond have been replaced. A berm and spillway have been roughed in and just need final compaction and armoring. A more defined drainage channel for the adit discharge has been cut and awaits armoring.
3. The crew began collecting large rocks which will aid energy dissipation in the flow path.
4. Road improvement work continued throughout the Site.
5. There were two extended shutdowns this operational period due to adverse weather (rain/lightning). However, erosion control measures to date have improved water management around the Site.
6. The crew demobilized from the Site on Friday, September 1, 2023, for Labor Day Weekend.

## **PLANNED ACTIVITIES**

For the Operational Period 8, September 4 to 10, 2023, the following operations are planned:

1. Complete the upper containment pond just below the adit.
2. Complete the drill pad installation.
3. Place large rocks in the drainage channel and adit flow path for energy dissipation.
4. Place straw bales and other flow/sediment mitigation tools in Sih-mem and Carpenter Creek.
5. Start toe repair work on the two fluvial tailing impoundments.
6. Continue road improvement, run on/off and erosion control work.
7. Build up road beneath the Glory Hole entrance to divert water away from the slope above the adit.
8. 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>



Work on drill pad.



Work on the upper containment pond.



Completed berm above benches.



Rock-lined channel on East side of benches.