

# **Site Update**

## **Silver Dyke Adit and Drainage Site**

### **Operational Period 12**

October 2 - 8, 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**

All EPA's response assets demobilized from the Site on October 5, 2023.

#### **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 (**complete**).
- e. Restore disturbed areas (**complete**).
- f. Repair the toe of the two large fluvial tailings ponds (**complete**).

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 (**complete**).
- d. Provide a stable flow channel for the adit drainage (**complete**).
- e. Conduct geophysical surveys (**complete**).
- f. Prep drill site above the adit (**complete**).
- g. Drill into and drain the adit (**complete**).
- h. Remove material blocking the adit to the Glory Hole (**will not be completed this year**).
- i. Install structure to keep the adit open and draining (**will not be completed this year**).
- j. Remove containment ponds (**complete**).

#### **Operational Period 12 Objectives**

The following were the Objectives for this Operational Period:

1. Remove the O'Brien Street bridge in Neihart.
2. Stabilize the toe of the tailings deposits in Carpenter Creek in several erosion-prone areas.
3. Complete restoration activities.
4. Demobilize all remaining equipment and personnel.

## Operational Period 12 Accomplishments

- The dangerous and abandoned O'Brien Street bridge in Neihart was carefully removed so as to not damage the adjacent bridge which was installed several years ago as a replacement. The demolished wooden bridge was hauled to the Glory Hole for disposal. The banks of Belt Creek were restored with rip rap and both approaches to the former bridge were blocked with boulders.
- The toe of the tailings deposits in Carpenter Creek were stabilized in three different locations using straw bales. These straw bales were incorporated into the bales which had been previously installed along the banks.
- Disturbed areas were seeded with a natural mix provided by the United States Forest Service. Erosion control structures were constructed in key locations with a particular focus on the mine access roads. Vehicular access to the Glory Hole was blocked with a large berm and ditch.
- All remaining EPA response personnel, contractors, equipment and materials were demobilized from the Site.

## PLANNED ACTIVITIES

1. Representative photos of Site conditions at the time of demobilization will be collected.



O'Brein street bridge over Belt Creek removal.



Area where former O'Brein street bridge crossed Belt Creek.



Berm and ditch installed to protect public safety and prevent vehicular access to the Glory Holes.



Replacement of hay bales along the toe of the tailings in Carpenter Creek.

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