



# TRIUMPH MINE SITE

## NEXT STEPS AND TIMELINE FOR SIGNIFICANT CLEANUP ACTIONS

### June 2024 Update

The Triumph Mine operated from the late 1800s until the 1950s, producing mostly lead, zinc, and silver. The mine is located 12 miles north of Hailey in central Idaho, near the unincorporated town of Triumph. Historical mining practices left high levels of heavy metals in the soil and water. The Idaho Department of Environmental Quality and the Idaho Department of Lands developed three focus areas for upcoming work.

### **Use infiltration to clean up mine discharge water**

Following a legal settlement, the State of Idaho agreed to either 1) obtain a discharge permit or 2) eliminate the need for a permit.

For option 1, permitting and treatment of discharge water would require constructing significant aboveground infrastructure with extensive operations and maintenance (O&M) and considerable long-term costs into perpetuity. This has led DEQ to pursue option 2 to eliminate the need for a permit. Much of the recent sampling around the site has been to determine a path forward. While river sampling has not identified any detectable impacts from the mine water discharge, a permit to discharge will not be granted without water treatment.

### **An infiltration system can clean the discharge water and eliminate the need for a permit.**

DEQ and IDL enlisted consultants to explore the feasibility of infiltrating the discharge water on IDL property, on the west side of the lower tailings pile. Preliminary modeling results indicate this is feasible to remove heavy metal contaminants. Due to precipitates in the water, the results predict the infiltration system will require ongoing regular maintenance every 5 to 10 years to remove precipitate accumulation.

### **Infiltration system options considered.**

DEQ and IDL considered either a buried subsurface infiltration gallery or above-ground infiltration ponds. Due to precipitates in the water, the long-term costs to maintain a subsurface system are

not economically feasible. Above-ground infiltration ponds are the preferable option as they can be designed to allow ongoing maintenance and look like storm water infiltration ponds present at most modern developments.

### **Opportunities for public input.**

Consultants completed feasibility modeling. A design of the infiltration ponds is available for public review and input until July 15. Please contact Michael Hahn with any input. If above-ground infiltration ponds are selected, construction could begin in spring 2025.

## **Maintain the existing remedy**

During routine O&M, DEQ and IDL detected elevated levels of lead and arsenic on some roads, ditches, and shoulders, suggesting a need for contaminant barrier maintenance. Consultants are evaluating the extent of soil contamination in the areas and developing a maintenance plan to meet cleanup goals required by the 1998 Record of Decision.

### **Opportunities for public input.**

Consultants will complete evaluations and develop a draft maintenance plan. DEQ and IDL expect to provide a draft plan to the community during summer 2024. Weather permitting, the work would begin in 2024 and continue into 2025.

## **Facilitate other projects at the Triumph Mine site**

- Reduction of contaminant loading to groundwater: During large rain events, standing water has been observed on the surface of the tailings impoundments. DEQ and IDL enlisted consultants to evaluate best management practices for the tailings impoundments, such as adjusting stormwater drainage channels and filling in low spots, to more efficiently direct storm water off the tailings surfaces.
- Maintenance of community soil repository: The community soil disposal repository on the lower tailings pile will be cleaned out to continue to accept contaminated soil from the community.
- Mine portal entrance stabilization: DEQ will stabilize the mine entrance to maintain the drainage system long-term by managing erosion on the hillside around the tunnel entrance.
- Other small maintenance projects: Fencing repairs and surge pond maintenance will be performed to ensure the remedy continues to protect human health and the environment.

**Contact:** Michael Hahn, ARPA Project Coordinator, [michael.hahn@deq.idaho.gov](mailto:michael.hahn@deq.idaho.gov), (208) 373-0248

# History and Background

1993

The United States Environmental Protection Agency (EPA) proposed listing Triumph Mine as a Superfund site. EPA identified the Idaho Department of Lands (IDL) and Asarco Incorporated as potentially responsible parties. Local residents opposed listing the Triumph Mine as a Superfund site over the stigma of a federal Superfund site located in their community.

1994

EPA and DEQ agreed to a Memorandum of Agreement that deferred cleanup oversight to DEQ. Without Superfund designation, the site cleanup activities became subject to federal regulations such as the Clean Water Act (CWA). Asarco and IDL entered into a legal agreement with DEQ to complete an initial assessment to determine the extent of the contamination and develop cleanup alternatives.

1998

DEQ prepared a Record of Decision (ROD), approved after public review and input, to describe the cleanup plan. The ROD details the selected remedy, five-year review requirements, and ongoing routine operation and maintenance (O&M) required to ensure the remedy protects human health and the environment. Initial cleanup activities were completed by 2004 and included:

- Removal of contaminated soils from residential properties and replaced with clean soils and new vegetation. Soils in nonresidential areas were replaced where heavy metals posed a risk to human health.
- Installation of mine water management infrastructure including a pipeline that combines discharge water from the mine adit and the permanent pond (located east of the lower tailings pile). The pipeline routed discharge water to the wetlands near the East Fork Big Wood River.

2003

EPA withdrew their proposal to list the Triumph Mine as a Superfund site. To control water discharge from the mine adit, Asarco installed the first plug in the Triumph Mine tunnel.

2009

Asarco entered into a bankruptcy agreement with the federal government and several states. DEQ and IDL received settlement funds as a part of the agreement.

2018

Without the protections of a Superfund designation at the site, the Idaho Conservation League filed a lawsuit against DEQ and IDL alleging a violation of the Clean Water Act for discharging pollutants in the pipeline from the mine adit and the permanent pond. During periodic, infrequent heavy precipitation or snowmelt events, this water can discharge directly into the river. DEQ and IDL entered into a settlement agreement with the Idaho Conservation League to pay legal fees and either obtain an Idaho Pollutant Discharge Elimination System permit or eliminate the need for a permit through the use of an infiltration system that diverts all water discharging in such a manner that no pollutants from this point source are entering navigable waters.

2019

DEQ and IDL submitted a joint discharge permit application as agreed upon.

2021

Idaho directed funding from the American Rescue Plan Act for use at the Triumph Mine Site. The availability of this funding expires in December 2026. After 2026, DEQ and IDL will need to request state funding for all activities at the Triumph Mine site.