

# Black Pine Mine

## Site cleanup update



September 2017

### Black Pine Mine History

Historical silver mining left hundreds of tons of mine waste at the Black Pine Mine Site 12 miles northwest of Philipsburg. The Site was littered with rock piles, mine adits and shafts, and piles of “tailings” – the powdery rock that is the byproduct of the milling process in which metals are extracted from ore. Tailings also were dispersed by water downstream of the Site.

The mine waste contained elevated levels of heavy metals: antimony, arsenic, cadmium, lead, manganese, and mercury, all of which pose significant risks to human health and the environment. Over time, the contaminants eroded and leached into the surrounding surface water, sediment and soil, and were detected downstream in the water and sediments of South Fork Lower Willow Creek – a major irrigation and fishery resource in the Flint Creek drainage.

DEQ is the lead agency for cleanup on private land, and the U.S. Forest Service (USFS) is lead for cleanup on USFS lands. DEQ partnered with USFS to characterize the contamination at the Site and downstream. The project was funded with trust dollars delegated to DEQ through the 2009 ASARCO bankruptcy settlement on the Black Pine Mine and grant

(Continued on back ...)

## Most construction work wrapping up

### Revegetation efforts continue, but growth will take time

With fall weather upon us, crews are wrapping up this season’s work at the Black Pine Mine Site.

The project is expected to be completed by the end of the 2018 construction season, with monitoring and maintenance continuing in 2019 and beyond.

DEQ understands the public’s deep interest in the success of this project and appreciates recent questions as we begin to transition from the clean-up phase to restoration.

There are approximately 108 days of work remaining to complete the cleanup contract. As we finish work and monitor the Site’s recovery, we’re committed to working with our project partner, the U.S. Forest Service (USFS), to keep the community well-informed and to address public comments and concerns.

DEQ worked closely with USFS wild-fire incident commanders to maintain safe operations and implement appropriate restrictions as Montana weathered a historic fire season.

#### What’s happening now?

DEQ contractors are currently finishing application of a slow-release organic fertilizer to the USFS Reprocessing Area and the Dispersed Sediment Areas. The Site was seeded in November 2016 with a mix of native



An aerial view of the repository area, where approximately 400,000 cubic yards of contaminated tailings and waste rock are now stored.

varieties. In August, 13 vegetation monitoring plots were designated across the Site, which will be used to assess plant survival rates and determine if additional seeding is necessary. Typically, replanted land needs two to three growing seasons for significant revegetation.

In addition, willow stakes and alders will be planted this fall in two areas of the Site – the USFS Reprocessing Area and the reclaimed areas within the Combination Mill Area of Concern. The trees are expected to aid revegetation and provide more diversity in the floodplain. While the Site is raw now, we’re witnessing the beginning of recovery and regeneration.

#### What about scattered trees ?

The trees create shady areas and trap moisture, creating microclimates that

Continued on back ...

**(... construction work continued)**

allow seedlings to take hold. The woody debris also creates habitat and travel ways for predators and prey. Over time, the debris decomposes, adding nutrients back to the soil. In addition, the woody debris provides erosion control and prevents damage by vehicles or other disturbances.

**Why weren't the logs sold?**

USFS decided against salvaging the logs because the volume, coupled with the expense of removal, didn't justify a commercial sale. Use of the woody debris at the Site saved the cost of buying and installing manufactured logs to aid revegetation. Past reclamation in the area has shown that woody debris is needed for successful revegetation.

**What about the pushed-over trees along the USFS road?**

Some of the trees along the USFS road will be removed by the end of the 2017 construction season. DEQ and USFS agreed last fall to postpone removal of the trees, which were pushed over to make way for large construction equipment, until now because it was more efficient to focus efforts on removing waste from the floodplain while groundwater levels were low.

The trees will be used in two ways:

- Trees identified for use as firewood will have limbs and root wads removed and will be cut to a manageable length. The firewood will be available via the USFS permit application process.
- Select trees identified along the road will have the root wads removed and will be used as woody debris to support revegetation in other areas of the Site.
- Select trees along the road will have root wads removed and will be left in place to support revegetation.

**Why is the Reprocessing Area swampy?**

Prior to mining activity, the Reprocessing Area was a low-lying, wet area with shallow groundwater. Removal of the tailings restored the area to its pre-mining grade, and the floodplain was reconnected to the stream.

**Is DEQ blocking or closing roads?**

DEQ will not block public road access through the Site other than temporary closures to ensure the safety of workers and the public during construction work. A short section of road was realigned at the repository location.

**(History continued ...)**

funds from the Montana Department of Natural Resources and Conservation for the downstream Forest Service and private lands.

Construction began in 2015, and approximately 400,000 cubic yards of contaminated tailings and waste rock have since been moved to a repository on the Mine Site, which is on private property held by the Montana Environmental Trust Group (METG) – the trustee appointed to manage the Black Pine cleanup and funds as a result of the 2009 ASARCO bankruptcy settlement.

DEQ and USFS will continue to monitor reclamation activities for success in vegetation establishment and water quality. The work was done using best management practices designed to prevent erosion, restore habitat for wildlife and vegetation, and restore a clean-functioning floodplain for the South Fork of Lower Willow Creek.



**Project Manager  
Devin Clary**

406-444-6415  
djclary@mt.gov

**Community Involvement Coordinator  
Karen Ogden**

406-444-6360  
Karen.ogden@mt.gov