

## Fiscal Year 2016 Unfunded New Construction Project



### Upper Tenmile Creek Mining Area Superfund Site Helena, Montana

#### Site Description

The [Upper Tenmile Creek Mining Area Superfund site](#) is located primarily within Lewis and Clark County, southwest of Helena, Montana. It consists of 53 square miles of the Upper Tenmile Creek watershed and includes the community of Rimini and the Landmark subdivision. Helena has relied upon Upper Tenmile Creek as a source of 50 to 85 percent of its drinking water.

EPA added the site to the National Priorities List in 1999. The community of Rimini relies on groundwater for domestic water supply, and has been receiving bottled water for drinking water since the beginning of the Superfund response in the late 1990s.

#### Site Status and Cleanup Actions to Date

The record of decision was signed in 2002. The major components of the selected remedy addressing mine waste, soil and sediment include:

1. Excavate and dispose of contaminated materials from high-priority mine sites and contaminated yard soils from residences and recreational cabins.
2. Monitor water quality and sediment quality in Tenmile Creek after cleanup of waste rock tailings and acid-mine drainage are complete.
3. Excavate, transport and dispose of contaminated roadway materials underlying Rimini Road.

The major components of the selected remedy addressing surface and groundwater include:

1. Cap and regrade collapsed shafts and adit portals, and construct drainage features to prevent or reduce stormwater and snowmelt from entering mine workings and contributing to acid-mine drainage.
2. Implement institutional controls to prevent use of new drinking water wells where contaminated aquifers exist.
3. Control waste rock, tailings and acid-mine drainage, augment stream flows during low-flow periods, and naturally attenuate contaminants in surface water.
4. Build a new community water system for Rimini residents using groundwater from deep wells.

Remedial activities conducted since the record of decision was signed in 2002 include:

- **2003 to present:** EPA has removed tens of thousands of cubic yards of mine waste and contaminated soils from residential properties, roads and mine sites.
- **2006:** EPA conducted a treatability study for metals removal from the Susie Mine adit discharge.
- **2008:** EPA amended the record of decision to provide individual septic systems and changed the source of the Rimini Community Water System from groundwater to treated surface water from Tenmile Creek, as no suitable deep-well source could be located.
- **2010:** EPA conducted an investigation of adit discharge source control of Lee Mountain and Upper Valley Forge/Susie mine sites.
- **2010-2011:** Remediation of Rimini and Landmark properties with access agreements completed.
- **2011:** Landmark subdivision potable water evaluation completed.
- **2011:** RV Ranch Phase I shallow soil sampling.

#### Unfunded Action

The unfunded fiscal year 2016 work for this site includes the interim remedies at the Crystal and Bullion mines:

- **Bullion:** Collect and treat contaminated mine water in a passive treatment system. Follow-up response to the removal action to open the mine tunnel to maintain free-flowing conditions and prevent future blockage and fluid backup in the mine.
- **Crystal:** Consolidate and cap mine wastes on site, collect and treat contaminated mine water in a passive treatment system, ensure the adit remains clear of blockage, and reclaim excavated areas on site and along the creek.

#### Funding Status

EPA has spent approximately \$7 million on removals and \$6 million on remedial action.