

NPL Site Narrative for Upper Tenmile Creek Mining Area

UPPER TENMILE CREEK MINING AREA Helena, Rimini, Montana

Conditions at Proposal (July 1999): The Upper Tenmile Creek Mining Area is located in the Rimini Mining District, southwest of Helena, Montana, and consists of abandoned and inactive hard rock mines producing gold, lead, zinc, and copper. Mining began in the Rimini Mining District before 1870 and continued through the 1920s. Little mining has been performed in the Rimini Mining District since the early 1930s. The site may include the entire drainage basin (i.e., watershed) of Tenmile Creek and its tributaries that are upstream from five City of Helena drinking water intakes: Tenmile Creek; Beaver Creek; Moose Creek; Minnehaha Creek; and Walker Creek that serve an estimated 24,569 people in the City of Helena.

Several possible contaminant sources upstream from the Tenmile Creek drinking water intake include mining wastes at the following mines: Red Water Mine, Red Mountain Mine, and Tenmile Mine. Additionally, the Little Sampson, the Lower Evergreen, and the Avon Mill are all located on Tenmile Creek upstream of the Tenmile Creek drinking water intake. These mines were reclaimed during a 1989 reclamation project by the Montana Department of State Lands, Abandoned Mine Reclamation Bureau (MDSL/AMRB) (currently known as the Montana Department of Environmental Quality (DEQ), Mine Waste Cleanup Bureau); however, there may still be sources of hazardous substances in the Upper Tenmile Creek Mining Area.

Other tributaries of Tenmile Creek above drinking water intakes include Beaver Creek, Banner Creek, Monitor Creek, Ruby Creek, Minnehaha Creek, Moose Creek, and Walker Creek. There are several additional possible sources on these tributaries, including the mining wastes at the following locations: SE Section 13 Mine located on Monitor Creek, Armstrong Mine located on Minnehaha Creek, Beatrice Mine located on Minnehaha Creek, Monte Cristo Mine located on Ruby Creek, Monitor Creek Tailings Mine located on Monitor Creek, Peerless Group of mines and Peter Mine, both located on Banner Creek, and National Extension Mine located on a tributary to Beaver Creek.

Some mines in the Upper Tenmile Creek Mining Area that are downstream from any drinking water intakes include the following: Lower Tenmile Mine (Engstrom Mill); Valley Forge (Susie Lode); Upper Valley Forge; Little Lily; and Lee Mountain. At least 48 underground mines have been identified in the Rimini Mining District according to the MDSL/AMRB mine inventory database.

Tenmile Creek is a documented fishery. Finfish tissue samples have been documented to contain elevated levels of arsenic. Surface water and sediment samples have been documented to contain elevated levels of arsenic, cadmium, copper, lead, and/or zinc that are attributable to the mines.

Status (October 1999): EPA is considering various alternatives for the site.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be

found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.