

NPL Site Narrative for Barker Hughesville Mining District

BARKER HUGHESVILLE MINING DISTRICT

Barker, Montana

Conditions at Proposal (December 1, 2000): The Barker Hughesville Mining District is located south of Great Falls, Montana and approximately 12 miles east of the Town of Monarch. Following the 1879 ore discovery in the Galena Creek drainage, hundreds of mining claims were established. Originally, high grade lead-silver ore was mined and hauled by wagon train to Fort Benton. In an effort to keep down shipping costs, several smelters were constructed in the mining district in 1881. Around 1883 mining tapered off due to the depletion of the rich, surficial ore bodies. Operations started again when the rail line was completed that connected the mining district to the Great Northern Line in Monarch, until the national demonetization of silver in 1893. Except for brief periods of mining activity in the 1920s, the 1940s and the 1970s, the Barker Hughesville Mining District ceased to function.

The waste pile sources included as part of this site are the Block P, the Danny T and the Tiger Mine, all located within one mile of each other. Releases from the waste piles have been observed in the adjacent surface water of Daisy Creek, Galena Creek, the Dry Fork of Belt Creek and Belt Creek. Belt Creek and Dry Fork of Belt Creek are both considered fisheries by Montana Fish, Wildlife and Parks, populated with brown trout, rainbow trout, brook trout, and cutthroat trout.

The Block P Mine area has operated periodically over the last 100 years under several different owners. The source consists of approximately 185,000 cubic yards of mostly uncovered and decayed waste rock located in and along Galena Creek. The Montana Department of State Lands/Abandoned Mine Reclamation Bureau (MDSL/AMRB) conducted a Preliminary Assessment (PA) of the Barker Hughesville mining district in 1990. Analytical results from soil samples from the Block P Mine indicated the presence of elevated levels of arsenic, cadmium, iron, lead, and zinc, as well as several other hazardous substances.

The Danny T mine is located midway between Barker and Hughesville. The waste rock pile is estimated at 10,200 cubic yards in volume, and the adit is estimated to discharge approximately eight gallons per minute. During the 1990 PA, aqueous samples from the adit contained elevated levels of arsenic, cadmium, copper, lead, and zinc. In 1994 the MDSL/AMRB sampled the uncovered waste rock and collected two aqueous samples from water that had flowed over the waste rock pile. The waste rock pile sample contained arsenic, copper, mercury, lead, and zinc. Aqueous sample results were similar to the 1990 analysis. Analytical results from soil samples submitted for total metals analysis indicated the presence of elevated levels of arsenic, copper, mercury, lead, and zinc, as well as several other hazardous substances.

The Tiger Mine claim was patented in 1892 and has operated periodically over the last 110 years under several different owners. The Tiger Mine consists of approximately 8,200 cubic yards of mostly uncovered and decayed waste rock. During 1993 MDSL/ARMB performed a Hazardous Materials Inventory on the Tiger Mine. Waste pile samples contained arsenic, cadmium, copper, iron, lead, manganese, mercury, nickel, and zinc. Analytical results for soil samples collected during the 1994 sampling effort by MDSL/

AMRB indicated the presence of elevated levels of arsenic, cadmium, copper, mercury, lead, manganese, nickel, and zinc.

Analyses of sediment and surface water samples from Belt Creek and Dry Fork of Belt Creek, collected over a four-year period to evaluate the Barker Hughesville Mining District, indicate that concentrations of arsenic, cadmium, copper, lead, manganese, nickel, and zinc are significantly above background concentrations.

Status (September 2001): EPA is considering various alternatives for this 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.