

## NATIONAL PRIORITIES LIST (NPL)

\*\*\*Final Site\*\*\*

September 2009

### FLAT CREEK IMM | Superior, Montana Mineral County

#### **Site Location:**

The Flat Creek IMM site is located 60 miles northwest of Missoula, Montana, and includes the town of Superior, unincorporated portions of Mineral County, and a parcel of a national forest. Approximately ten acres are directly affected by mining.

#### **Site History:**

The site is the result of abandoned historic hard rock mining operations. The Iron Mountain Mine and Mill (IMM) operated from 1909-1930 and from 1947-1953, producing silver, gold, lead, copper, and zinc ores. The site consists of four components: residential soil contamination in the town of Superior, contaminated drinking water sources, abandoned mine and milling properties, and contaminated sediments in and near Flat Creek. Mine tailings from IMM were brought into the town of Superior and used as fill, road base, and driveway material more than 40 years ago.

#### **Site Contamination/Contaminants:**

IMM contains multiple mine waste tailings piles with elevated levels of arsenic, antimony, cadmium, lead, and manganese above long-term health risk benchmarks. Many of the tailings were transported into Flat Creek due to flooding after a forest fire in 2000. Draining adit water was found to contain elevated levels of arsenic, lead, and antimony above EPA's Safe Drinking Water Act maximum contaminant levels (MCLs). In Superior, contaminants of concern are primarily lead and arsenic.

#### **Potential Impacts on Surrounding Community/Environment:**

Human health threats include contaminated residential soil, contaminated private water wells and surface water intakes, and contamination of the main municipal drinking water well, which is no longer in use because of detections above the MCL for antimony. Flat Creek and the downstream Clark Fork River are both fisheries. Waste piles have open public access. Ecological risks include acid mine drainage from an old mining adit reaching Flat Creek and surface water run off and flooding, which has spread piles of mining and milling waste throughout the Flat Creek flood plain. This has contaminated the soil and surface water, causing ecological risks for fish and wildlife.

#### **Response Activities (to date):**

In 2002, EPA conducted a time-critical removal of mine tailings used as fill in town because of possible short term health risks from lead and arsenic. The areas addressed by removal actions include the high school track, portions of the county fairgrounds, and a number of private driveways and roads in Superior. After the removal was complete, a reassessment in 2007 showed other properties in town exceeded typical long term health risk benchmarks.

#### **Need for NPL Listing:**

The Town of Superior has requested the State of Montana refer the site to EPA because other federal and state cleanup programs were evaluated, but are not viable to provide a comprehensive cleanup of the site. EPA received a letter of support for placing this site on the NPL from the State.

*[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination.]*

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 <http://www.atsdr.cdc.gov/toxfaq.html> or by telephone at 1-888-42-ATSDR or 1-888-422-8737.