

Manning Canyon/Fairfield



Introduction:

The town of Fairfield is located in Utah County, Utah, about 36 miles southwest of Salt Lake City in the Cedar Valley. The town lies approximately 4.5 miles southeast of the Manning Canyon Mill Site, a former operating center of the Mercur Mining District, which sent gold ore to be processed at the mill. In 1898, the treatment of ore from the Mercur Mine was discontinued and the Manning Canyon Mill was primarily used for reprocessing tailings. A second mill was constructed on site in 1933 and was used for processing additional ore from the Mercur Mine as well as for reprocessing tailings. Both mills were in operation until 1937 and processed an average of 536 tons of material per day. It is estimated that approximately 720,000 cubic yards of mine tailings were left at the site when operations were completed. The Manning Canyon site covers over 1,470 acres (about 2.3 square miles) and originally contained six well-defined tailings deposits that covered approximately 66 acres.

After the Manning Mill site was abandoned, two on-site tailings ponds were breached, allowing the tailings to move downgradient of the site. Because of the terrain in the area, these tailings were highly susceptible to wind and water erosion and, over several decades, have gradually migrated downgradient into the town of Fairfield.

Summary:

- The [Public Health Assessment \(PHA\)](#) evaluated the health risks to Fairfield residents and visitors from contaminated mine tailings that have moved off-site into surface water, sediment, soil, and air originating at the Manning Canyon

abandoned mine site. During years following the mill closure, tailings impoundments were breached, resulting in the migration of mine tailings into the town of Fairfield. Erosion due to flooding and heavy rains resulted in movement of tailings into streams, roads, and properties in Fairfield. The Manning Canyon tailings contained elevated levels of arsenic, mercury, lead, thallium, and other metals. The PHA addressed only contaminated land not owned by the Bureau of Land Management (BLM). Previous investigations of BLM-owned land have resulted in remediation and these areas do not pose additional threat to Fairfield residents.

- **Water:**
 - Fairfield drinking water (private wells, municipal sources, or Big Spring Creek) DOES NOT contain harmful levels of arsenic, thallium or mercury.
 - Seasonal standing surface water located in the first 700 feet of Big Creek Ditch east of Highway 73 contains unhealthy levels of arsenic and thallium. Contact with surface water at this location should be avoided. Parents are advised to reduce or eliminate children's contact with water at this location.
- **Soil:**
 - **Residential:** Some residential properties contain levels of arsenic that could pose a health risk from long-term (more than one year) exposure.
 - **Roads:** Small portions of Highway 73 contain levels of arsenic that could pose a health risk from short-term exposure; however, these portions are covered with asphalt and are contained.
 - **Non-residential:** Some properties contain levels of arsenic that could pose a health risk from short-term exposure. Future health risks should be assessed prior to development of these nonresidential properties.
- **Air:**
 - The ambient air pathway was not assessed due to insufficient data. There is some concern that elevated levels of airborne contaminants may be present especially during the spring plowing season. In order to fully evaluate this pathway and the potential risks that may result, additional air samples should be taken and analyzed during high exposure conditions.

Documents

- [Public Health Assessment](#)

Health Education

- [Resident Factsheet](#)

Contaminants

- Arsenic~ToxFAQ
- Arsenic~Health Statement
- Arsenic~ToxProfile

Additional Information

- Utah County Health Department
- Utah Cancer Control Program
- Bureau of Land Management