

May 2010 DH Newsletter Article

EPA completed the Remedial Investigation (RI) in March 2010. The results of the RI indicate a need to take cleanup actions at the site to protect human health and the environment. If you would like to read the report, please visit the Dewey-Humboldt Library or visit the EPA's website <http://www.epa.gov/region09/ironkingmine>. The next step in the Superfund cleanup process is the development and evaluation of cleanup options.

EPA collected soil, sediment, surface water, ground water, and air samples from the Iron King Mine, Humboldt Smelter, residential and commercial areas, and waterways.

The contaminants of concern are arsenic, lead, and sulfate. The Iron King Mine, Humboldt Smelter, and portions of Chaparral Gulch contain tailings, ash, and slag with high levels of arsenic and lead. Exposure to these metals could present a health risk if a person is in contact with them over a long period of time. EPA recommends that residents, especially children and the elderly, limit or avoid contact with soils and any water in these areas, and obey posted EPA caution signs until these areas can be addressed through cleanup actions.

What about drinking water?

The municipal water supply meets federal drinking water standards. However, some private wells have arsenic, chloride, and sulfate concentrations above the federal drinking water standards. The levels of arsenic detected are similar to arsenic levels found across Arizona and are not indicative of impacts from the Site. Additional information concerning drinking water from private wells can be found in Appendix I of the RI and at the following website: http://www.epa.gov/privatewells/pdfs/household_wells.pdf

Air Quality

Air samples show that dust and metal concentrations are highest during high wind events following extended dry weather. The Iron King Mine and Humboldt Smelter are the primary sources of ambient air contamination. **None of the air samples exceeded the levels for short-term health risks.** However, children, the elderly, or people with existing respiratory problems should limit outdoor activity during windy days. EPA will be working with property owners to reduce dust generation until a permanent cleanup action is taken.

Off-site Soils

EPA sampled 65 residential, commercial, and public properties. Arsenic and lead concentrations in surface soil are higher on properties adjacent to the Chaparral Gulch or downwind of the Iron King Mine and Humboldt Smelter areas. Yards further away from the mine and smelter sites have lower concentrations of arsenic and lead and are less likely to be impacted. The full extent of residential impacts has not been determined as many yards have not yet been sampled.

EPA would like to sample all yards in close proximity to the site. EPA will be making every effort to contact residents to request access to sample; residents may also leave a message at (800) 231-3075 to request sampling. While allowing EPA to sample your yard is completely voluntary, EPA and ADEQ highly recommend it. This information will be used to plan residential yard cleanup actions.

The Humboldt Elementary School playground has low levels of arsenic and lead and is not considered to be impacted by the site.

If you would like more information, please contact Leah Butler at (415) 972-3199 or butler.leah@epa.gov.