



Air Quality and Your Health

Near the Iron King Mine & Humboldt Smelter Superfund Site



Summary of the 2013 Health Consultation by the Arizona Department of Health Services and the Agency for Toxic Substances and Disease Registry

Background

Dewey-Humboldt residents have voiced concerns about air quality near the superfund site during high wind events. In 2012 – 2013, the Arizona Department of Health Services (ADHS) and the Agency for Toxic Substances and Disease Registry (ATSDR) reviewed available air quality data collected by the U.S. Environmental Protection Agency to find out whether breathing outdoor air poses health risks to residents. ADHS and ATSDR looked into two types of air pollution:

- 1) Metal particles in air, such as lead and arsenic, and
- 2) Small dust particles.

Dust and metals in Dewey-Humboldt air can be from natural sources and from the Superfund site. ADHS and ATSDR made these conclusions and recommendations.



Metal particles in Dewey-Humboldt air are unlikely to harm people's health.

Breathing in metals (such as lead and arsenic) at levels found in outdoor air is not likely to harm people's health, no matter what the wind conditions are.

Windy conditions can make dust near the Humboldt Smelter at levels that may affect the health of sensitive people.

Data showed that sometimes particles in the air near the Humboldt Smelter reach levels high enough to be a health concern to sensitive individuals.

- Windy conditions near Humboldt Smelter is a health concern for sensitive people like children, older adults, and people with heart or lung illnesses at more risk for:
 - Coughing, wheezing, and difficulty catching breath
 - Bronchitis
 - Asthma attacks
 - Worsening of lung or heart illnesses
- High levels of dust were not found near the Iron King Mine or Humboldt-In-Town.

ADHS and ATSDR recommendations to agencies

- U.S. EPA and ADEQ should use good dust control methods during future cleanup activities. Also, the level of small particles (PM_{2.5}) in air should be measured during future air pollution monitoring events.
- ADEQ should give warnings to residents when air pollution may reach unhealthy levels. These warnings should contain recommendations residents can follow to protect their health.

ADHS and ATSDR recommendations to residents

Pay attention to wind and dust conditions in your community. Children, older adults, and people with heart or lung illnesses should try to avoid breathing high levels of dust by staying indoors with the windows closed during dust storms.

For more information: Call the Arizona Department of Health Services, Office of Environmental Health at (602) 364-3128. To get the full Health Consultation report, please visit: <http://goo.gl/xHpfPF>