Health Consultation Completed

The Washington State Department of Health, in cooperation with the Agency for Toxic Substances and Disease Registry (ATSDR), has completed an evaluation of potential human health risks from lead and arsenic in soil around the former LeRoi Smelter site in Northport.

Site Background

The former LeRoi Smelter site is located northeast of the city center of Northport, Washington. The Northport-Waneta road borders the 32 acre site on the east and south. Burlington Northern Santa Fe Railway runs parallel to the Columbia River and borders the site on the north. Highway 25 makes up the western border of the site. Residential homes are located to the west of the site. A city park is located about 50 feet northwest of the site along the Columbia River.

The former facility smelted lead, copper, gold and silver ores. It was made up of several buildings. Currently, the city of Northport operates three drinking water wells located at the site of the brick platform used for initial roasting of the ore.

The Environmental Protection Agency (EPA) has informed residents of the Northport area about voluntary free residential soil testing for lead and other contaminants. The EPA encouraged residents with family members at higher risk (pregnant women/children six and under) to have the soil tested around their homes. The EPA will begin cleaning up this summer.

Contaminants of Concern

Lead and arsenic are the main contaminants of concern in Northport soil. Over time, swallowing even small amounts of soil contaminated with lead or arsenic could lead to a variety of health problems. Young children are particularly susceptible to lead contamination. Studies have shown that household dust is one of the leading ways that young children are exposed to lead. Most people swallow small amounts of soil and dust (and any contaminants they contain) without realizing they have done so. Young children often put hands, toys, pacifiers, and other things in their mouths, and these may have dirt or dust on them that can be swallowed. Soil sticking to homegrown vegetables will be swallowed when the produce is eaten. Adults may swallow soil and dust through activities such as gardening, mowing, construction work, and dusting.

Lead is normally found in soil. The widespread use of products like leaded gasoline, lead-containing pesticides, lead-based paint, and the emissions from industrial operations such as smelters has resulted in higher levels of lead on many properties in the state.
Swallowing or breathing lead can be harmful. Lead is a special danger to children under six years of age. It can damage the brain, nerves, kidneys, and other parts of the body. Children who are lead poisoned find it hard to learn and may not behave well. If you are pregnant, you can pass lead from your body to your unborn baby.

It is difficult to know how arsenic will affect someone because people react differently to arsenic. Illnesses linked to long-term exposure to small amounts of arsenic in drinking water are bladder cancer, lung cancer, skin cancer, liver cancer, prostate cancer, kidney cancer, cardiovascular disease, diabetes, nerve damage, and changes to the pattern of color or thickness of the skin.

Conclusions and Recommendations

1. **A public health hazard exists for children and adults who may be exposed to lead and arsenic contaminated soil and dust at the smelter site and at some homes.**
2. Children should not be allowed to play at the smelter site until after the site is cleaned up. The property should be fenced to keep children out. Signs should be posted to let people know about the dangers of contaminated soil.
3. The smelter site and yards with contaminated soil need to be cleaned up to levels that are protective of children’s health.
4. Efforts need to be made to educate the community about how they can reduce their exposure.
5. **The Department of Health strongly recommends blood lead testing for children six and under, older children if they play at the LeRoi Smelter site, and women of child bearing years.**

Healthy Actions You Can Take

1. Wash hands and toys after playing outside.
2. Vacuum carpets and rugs frequently, plus wet mop and/or wet dust all other surfaces in your home.
3. Take off your shoes before entering your home to avoid tracking soil into your house.
4. Wear gloves while gardening and wash vegetables before eating them.
5. Cover up exposed soil in your yard by growing grass on it.
6. Wipe down pets before you let them inside.
7. Serve foods that are a good source of calcium and iron. These foods help protect your child from lead poisoning. Include foods high in Vitamin C – they help your body absorb iron.

More Information on Lead

National Safety Council
[http://www.nsc.org/safety_home/HomeandRecreationalSafety/Poisoning/Pages/LeadPoisoning.aspx](http://www.nsc.org/safety_home/HomeandRecreationalSafety/Poisoning/Pages/LeadPoisoning.aspx)

Centers for Disease Control and Prevention

Agency for Toxic Substances and Disease Registry

For More Information

Washington State Department of Health, 1-877-485-7316