Community Protection Measures for Arsenic and Lead Contaminated Soils

Lowering exposure to contaminated soil

In some areas of Vashon-Maury Island, long-term exposure to soil contaminated with arsenic or lead could cause health problems. Young children are most at risk for exposure because they tend to be less careful, exhibit more mouthing activity and have more contact with soil than adults and older children. To minimize the chance of health problems, Ecology (in partnership with Public Health — Seattle & King County and state Department of Health) suggest that people follow the guidelines described below to reduce their exposure to contaminated soil. The probable source of much of the surface soil contamination is the now-closed ASARCO (American Smelting and Refining Co.) copper smelter that operated at Ruston near Tacoma from 1890 to 1986. Contaminants from the smelter smokestack were likely spread by wind and deposited over a large area, including portions of King and Pierce counties. We call the area affected by smelter emissions the “Tacoma Smelter Plume” site.

Child-focused measures

In order to reduce the risks of exposure to potential contamination:

- **Keep children from playing in bare soil contaminated with arsenic or lead.** Covering bare soil with grass or wood chips can provide some short-term reduction in exposure.
- **Encourage your children to wash their hands and faces** after playing outdoors.
- **Damp mop and dust your house frequently** to reduce your child’s contact with contaminated dust.
- **Maintain the painted surfaces** on the inside and outside of your home (especially if it was built before 1980) to avoid exposing children to lead paint chips and dust.
- **Children who eat a well balanced, low-fat diet** rich in iron and calcium are less likely to absorb lead from their environment.

Adult-family focused measures

The following measures may also help reduce exposure risks:

- **Don’t eat, drink, smoke, or chew any material** while gardening or working in contaminated soils.
- **When working in contaminated soil, dampen the soil to minimize dust.** If you can see dust in the air, you are probably breathing and swallowing it. Wear a dust mask for maximum protection.
- **Wear shoes and gloves** when working in contaminated soil. Leave them outside before entering your home.
- **Wash hands after working** in contaminated soil.
- **After digging in contaminated soil, wash clothing separately** from other items.
- **Contaminated soil can get on pets.** Keep them clean to avoid bringing soils inside.