Guidelines for Reducing Potential Exposure Everett Smelter Site

The highly contaminated soil over the original smelter has been covered, fenced or removed and **there is no immediate danger to human health**. However, it is uncertain what minimum level of long-term exposure to soil contaminated with arsenic, lead or cadmium poses a significant health risk. Therefore, **it is prudent to follow the precautionary health guidelines** outlined below.

Note that this advisory is not specific to any property. Concentrations of arsenic, lead, and cadmium in soil vary from location to location. Generally, higher levels of metals are found in the soil near the original smelter site and lower levels are found in outlying areas. Arsenic is the metal of most concern. Also note that large chunks of smelter slag found in the area are less hazardous than dust particles because dust can enter into the body more readily.

1. Children are more likely than adults to be exposed to arsenic, lead, and cadmium in soils and dust. Their exposure should be limited as much as practical.

- Children should not play in dirt. Play areas covered with grass or some other material will reduce a child's 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 dust.

2. Avoid eating vegetables and fruit grown within the affected area.

- Lead and cadmium are known to accumulate in leafy vegetables such as lettuce, spinach, carrots, endive, cress, and beet greens. Onions, mustard, potatoes, and radishes have a moderate ability to uptake heavy metals from the soil.
- It is not known if these metals accumulate in blackberries or other fruit, so avoid eating them until more information is available. Metals were not found above the laboratory detection limits in apples tested from the site.
- If vegetables or fruit are consumed from local gardens, wash thoroughly before eating.

3. Use caution while working in the soil.

- Avoid all unnecessary exposure to soil or dust in the affected area.
- Spray the soil with water before and during the project to minimize dust. Do not saturate the soil or allow water to run off the site.
- Wear clean, full body protective clothing (coveralls or long sleeve shirt and pants), shoes and gloves (see page 9). For maximum protection wear a dust mask or other respiratory protection. Wash work clothes separately from other clothing.
- Don't eat, drink, smoke, or chew any material while in the work area.
- Clean surfaces by wet mopping, spraying with water, or vacuuming with a HEPA filter. Don't sweep or blow the surface.

4. Avoid other sources of metal exposure.

- Minimize children's exposure to hobbies that use lead (e.g., hobbies that involve the use of lead solder or paint).
- Make sure your child eats a well-balanced diet. Children who have acceptable iron and calcium intake, and low fat intake are less likely to absorb lead from their environment.
- Homes built before 1980 could have lead-based paint. Maintain the painted surfaces in your home to avoid exposure to lead paint chips and dust.
- If your job involves lead or lead compounds, shower and change clothes before returning home.

5. Construction activity.

- Employees of companies who are required to work in soil within the study area should refer to Good Practice Guidelines on page 9, and WAC 296-62 (the General Occupational Health Standard), or consult the Department of Labor and Industries for assistance on how to reduce work-related exposure to contaminated soil.
- Use heavy equipment that have enclosed cabs whenever possible.
- Soil removal from any site in the study area must be carried out in consultation with the Snohomish Health District. Soils in the area may have the potential to be designated as Dangerous Waste due to high metals content.

6. Pet precautions.

- Pets can come in contact with contaminated soil, which may then be carried into the home. If possible, keep pets out of areas of exposed soil. Inspect your yard and look for exposed soil your pet may have access to. Fill any holes where dogs may be digging as soon as it is noticed. If possible, restrict pet access from your house. Bathe your pets frequently. Wash your hands after handling your pet, and before preparing or eating food.

Community Protection Measures

The Snohomish Health District has implemented a Community Protection Measures Program for residents living in the Everett Smelter Site Study Area. ASARCO, Inc. has funded this program since March of 1997, and the program will continue until the cleanup has been completed. The intent of the program is to address concerns about the potential for adverse health effects among individuals living and working in and around the Everett Smelter Site by providing the following services.

Soil Disposal Project

Soil with arsenic concentrations above 20 ppm (mg/kg) is considered solid waste and must be disposed of properly. It cannot be taken off site to be used as clean fill. Residents may now dispose of small quantities of soil generated inside the Community Protection Measures Area free of charge. Call Clint Stanovsky, ASARCO, Inc., at 425.259.0822 for more information.

Education and Public Presentations

Community education focuses on the nature of the metals found at the site, their potential hazards, and recommendations to reduce exposure to these metals. The Snohomish Health District gives public presentations about health issues and the nature of the Site to specific groups and local health care providers.

Distribution of Public Health Advisories

The Snohomish Health District distributes Public Health Advisories to the residents on the site twice a year, which recommend ways to reduce exposure to metals in the soil.

Technical Library

The Snohomish Health District has a small technical library for residents of the Everett Smelter Site and local health care providers regarding health and risk issues associated with the site. The Snohomish Health District also is developing a database of soil sample results that can be viewed by the public.

Environmental Investigations

The Snohomish Health District responds to specific complaints regarding personal exposure to dust or soil. The Snohomish Health District will evaluate any situation of concern and provide individualized advice, provide educational materials regarding control measures, and provide referrals to other agencies if needed.

Urine Arsenic Testing

Free, confidential, and voluntary testing for exposure to arsenic is now being provided as part of the Community Protection Measures Program. Residents living within the Everett Smelter Site Area, or persons spending significant time there, can be tested for arsenic exposure twice a year. Please note that the urine arsenic test is a simple and reliable testing method commonly used in occupational medicine. However, the test has limitations. For example, arsenic will only remain in a person's urine about three days after exposure. Therefore, the test will not be able to show evidence of exposure that occurred long ago, nor can anyone make conclusions about long term health status from these test results. **People in the study area should consider taking part in this program if they have had recent contact with dust or soil known to be contaminated.**

A physician specializing in occupational medicine will review test results at no charge. The consulting physician will send participants an explanation of the test results. If positive results are found, participants are eligible for additional testing and follow-up.

Other Testing

Personal Air Testing is available for workers on the site if not provided by an employer. Blood lead testing may also be available in the future.

If you are interested in participating in the testing or have need for other services, please **contact Mike Young of the Snohomish Health District at 425.339.5250**.