



Frequently Asked Questions about Tacoma Smelter Plume

Free Soil Safety Program for schools & childcares

Working together to protect children from area-wide soil contamination

The Soil Safety Program partners are:

- Washington Department of Ecology, Toxics Cleanup Program
- Public Health - Seattle & King County
- Tacoma-Pierce County Health Department
- Washington Department of Early Learning
- Washington Office of the Superintendent of Public Instruction

NEW!

The Soil Safety Program now serves public parks, camps, and multi-family public housing!

See the back of this handout for more information and contacts.

Q: What is the Soil Safety Program?

A: For almost 100 years, the Asarco company had a copper smelter in Tacoma. Air pollution from the smelter settled on parts of King, Pierce, Kitsap, and Thurston counties. Arsenic and lead are still in the soil. Some child play areas may have arsenic and lead in amounts that are a health concern.

In 2005, the legislature passed a law (Chapter 70.140 RCW) to keep children safe from polluted soil. This law resulted in the creation of the Soil Safety Program that addressed schools and childcare play areas within the program service area. As of July 2010, the Washington Department of Ecology has sampled nearly 800 schools and childcares and cleaned up over 100.

You are invited to participate in the Soil Safety Program! It assists schools and childcares in providing a safer and healthier setting for children. It can reduce children's contact with smelter arsenic and lead by identifying play areas where children are exposed to polluted soil. The program provides:

- ✓ Free soil testing at all schools and childcares in the Soil Safety Program service area (please see map on page 3).
- ✓ Free design assistance, labor and materials to put soil safety actions in place – at schools and childcares with arsenic and lead above state standards.

Ecology funds and manages the Soil Safety Program as part of cleaning up the Tacoma Smelter Plume. Public Health–Seattle & King County and the Tacoma-Pierce County Health Department are key partners because of their expertise and knowledge of the local community. You can be another important partner in protecting children where they play!



Q: Is my school or childcare in the Soil Safety Program service area?

A: If you received this handout from Ecology or your local health department, you are probably in the service area (see map on page 3). All schools and childcares in the orange portion of the service area will be prioritized. Schools and childcares in the yellow, outer portion are less likely to have smelter contamination and will be evaluated to see if they need sampling.

Q: Am I required to participate in the Soil Safety Program?

A: Yes. Schools and childcares within the Soil Safety Program service area are required to participate. Schools and childcares within the service area have a greater potential for polluted soil than those outside the service area. Schools include both public and private schools. Childcares include both childcare centers and home childcares. The program also includes preschools and Head Start programs, and Early Childhood Education and Assistance Program (ECEAP) facilities.

By law, schools and childcares within the service area must provide property access for soil testing. If test results are above state standards, Ecology will offer free design assistance, labor and materials for soil safety actions.

Q: How is Ecology prioritizing sampling and cleanup?

A: Ecology is prioritizing sampling and cleanup based on the map zones shown on page 3:

1. **Zone 1** – most likely to have elevated soil arsenic.
2. **Zone 2** – likely to have elevated soil arsenic.
3. **Zone 3** – may have elevated soil arsenic depending on property location and history—will be evaluated on a case-by-case basis.

Q: Why should I care about arsenic and lead?

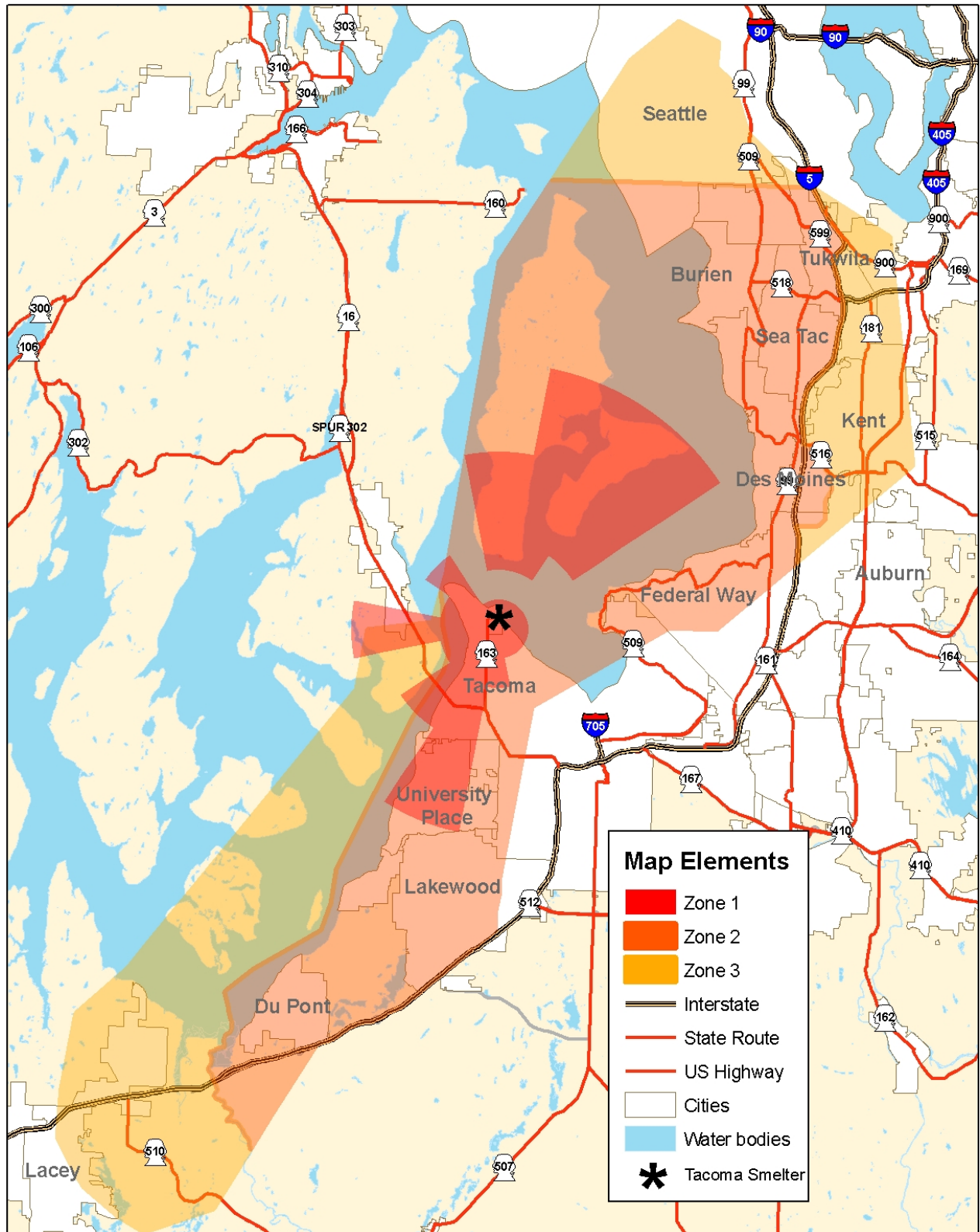
A: Arsenic and lead cause several health problems in people. Whether someone is affected depends on the amount of arsenic and lead taken into his or her body over time. Young children are more vulnerable because they tend to put dirty fingers and toys into their mouths. Their hands and toys may have arsenic and lead on them.

Scientists have linked arsenic to a variety of health problems including heart disease, diabetes, and cancer of the bladder, lung, skin, kidney, liver, and prostate. Lead can cause behavioral problems, permanent learning difficulties, and reduced physical growth.

For more information on health effects of arsenic and lead, contact your local health department or visit Ecology's website (see the last page of this handout).



2010 Soil Safety Program (SSP) Service Area



Q: What funding and resources are available?

A: Ecology will pay for soil testing and soil safety actions at schools and childcares in the service area (page 3). We expect to offer free testing and soil safety actions until at least 2020. Health departments plan to continue to offer education and outreach beyond 2020.

Q: Who will test my soil and when?

A: Your local health department will evaluate your child play areas and, if needed, test your soil. These services will be free.

This handout should have arrived with a letter from your local health department asking permission to come and test soil in your play areas. Your letter should include a soil testing permission form. To receive a free evaluation and soil testing, you must complete and return the form to your local health department. Once the health department receives your form, they will call you to set up a convenient time to test your play area soils (usually within a few months).

Q: What if the health department already tested my soil for smelter arsenic and lead?

A: If the health department or Ecology's contractor has already sampled your soil for smelter arsenic and lead, please call the health department and let them know you received the cover letter and form by mistake. If arsenic or lead levels in your soil are of concern, Ecology will contact you to assist you with soil safety actions.

Q: What can I do to create a healthier environment for children while I am waiting to get my play area soil tested?

A: Please contact your local health department for information about what you can do while waiting to get your soil tested. See contact information for Public Health–Seattle & King County and Tacoma-Pierce County Health Department on the last page of this handout.

Q: What are soil safety actions?

A: Soil safety actions are actions we can take to protect children from soil arsenic and lead. These actions also help protect adults working at schools and childcares. You are probably already taking actions that are positive and helpful. Many soil safety actions are common sense and easy to do, and have health benefits beyond reducing contact with arsenic and lead.



Some simple soil safety actions you can take now include:

- Keep children from putting dirt in their mouths
- Wash hands and faces after playing outside and before eating
- Keep dirt outside by using a door mat
- Wash children's toys and pacifiers often

Other soil safety actions, which take time to design and plan, include:

- Cover soil with sod or wood chips, or other material approved for child play areas
- Mix the soil
- Remove the soil and take to a landfill

Ecology will work with you to select the actions best suited for your school or childcare.

Q: How will Ecology help me with soil safety actions?

A: As soon as we have your test results, Ecology will see if they meet state cleanup levels for arsenic and lead in soil. If your soil test results exceed these levels (table below), Ecology will contact you to set up a meeting. Ecology will explain the test results, and talk about different soil safety actions that will help protect the public that uses your play areas. Together, we will make a Soil Safety Action Plan for your play area. Ecology and the health departments will then provide the funding, labor and educational resources for these actions.

State Cleanup Levels for Soil Arsenic and Lead

Measure	Arsenic parts per million (ppm)	Lead parts per million (ppm)
Average of Soil Test Results	Over 20 ppm	Over 250 ppm
Maximum Amount Found	Over 40 ppm	Over 500 ppm

Q: What will my test results show?

A: Soil testing will provide a general picture of soil arsenic and lead in your play areas. The health department will take about eight samples of soil from each play area at your school or childcare. Ecology will average the results, and look at the maximum amount of arsenic and lead. Ecology will then compare the results with state standards. The table above lists the arsenic and lead amounts Ecology will use to determine if a school or childcare needs a Soil Safety Action Plan.

Once you have the test results, you can make an informed decision on what to do next. If the average or maximum amounts of arsenic or lead in your soil don't meet state standards, Ecology will work with you to develop a Soil Safety Action Plan for your school or childcare.



Q: What must schools and childcares do?

A: Here is what you have to do as an important partner in the Soil Safety Program:

1. Soil Testing – All schools and childcares must have their soil tested. This involves:

- ☐ **Signing a property access form.** This gives permission for local health department staff or an Ecology contractor to take soil from your play areas.
- ☐ Providing a simple drawing of your property and buildings, if you have one.
- ☐ Answering questions about the history and use of your property, including where children play.
- ☐ **Reviewing your soil test results and learning what they mean.** If soils are below state cleanup standards (page 4), no action is required. Ecology will send a certification of participation and window decal for taking part in the program. No other action is required of schools and childcares with low levels of arsenic and lead.

Your local health department and Ecology staff will be available to answer your questions about soil test results. Ecology and your local health department can also provide advice if you want to use your own funding to put actions in place.

2. Soil Safety Action Plan – Ecology strongly encourages Soil Safety Actions for schools and childcares with arsenic and lead above state standards. The state law requires schools and childcares with arsenic and lead above state standards to put a Soil Safety Action Plan in place, or notify parents and families in writing of the test results. To take advantage of free soil safety action design assistance, labor and materials, you will need to:

- ☐ **Work with Ecology to create a Soil Safety Action Plan for your school or childcare.** You will need to sign a Soil Safety Action Plan agreement to reserve free resources. The plan will be designed for your setting and situation, and will usually have two parts:
 1. **Actions such as hand washing, using doormats, and other steps to make a safer and healthier setting for children.** Your local health department offers fun and creative tools to engage children in healthy behaviors.
 2. **Actions that require design and planning such as covering or removing polluted soil, or redesigning play areas.** Ecology will work with administrators, owners, and operators to identify the best approach, coordinating work with other priorities at your school or childcare.



- ☐ **Sign a Soil Safety Action Plan agreement.**
- ☐ **Maintain the soil safety actions.** Ecology and your local health department can help get soil safety actions started but you will need to make sure they continue into the future. Upkeep of soil safety actions such as hand washing, landscaping, and play area groundcovers will be your responsibility. Ecology will work with you to estimate maintenance costs before asking for your signature on the Soil Safety Action Plan agreement.
- ☐ **Post a certificate of participation in the program that describes your Soil Safety Action Plan.**
- ☐ **Allow Ecology staff to visit your school or childcare occasionally, to ensure soil safety actions are still working well for your school or childcare.**

Thank you!

***We look forward to working with you to make schools and
childcares a healthier and safer place for children.***



Where to Learn More about the Soil Safety Program

Please contact Department of Ecology for general program information.

NEW! Soil Safety Program for public parks, camps, and multi-family public housing. For more information, visit: http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/soilSafety/SoilSafety.htm

Ecology's Soil Safety Program Coordinator is ready to answer your questions:

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TTY	711, or 1-800-833-6388

Contact your local health department for soil testing information.

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