

## Cleanup Plan Reading Guide

Department of Ecology has a plan—the Interim Action Plan—for managing risk and cleaning up the Tacoma Smelter Plume. This reading guide explains how to read the plan and suggests what to comment on. **Please submit comments by December 20, 2011.**

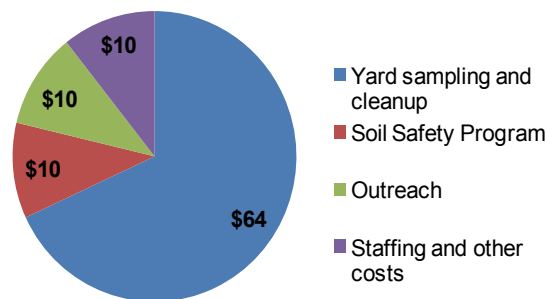
Asarco’s former copper smelter in north Tacoma emitted arsenic, lead, and other heavy metals. These pollutants were carried by the wind and settled on surface soils, creating the Tacoma Smelter Plume. In 2009, the State of Washington received a settlement from Asarco for environmental damages. Ecology plans to use over \$90 million for the Tacoma Smelter Plume, over 10 years.

### Plan Overview

The plume is too large to clean up all soils. Ecology will focus most of the funding on child play areas and yards in the most contaminated areas of the plume. The plan has four main pieces:

1. Sample and clean up yards in the most highly contaminated areas of the plume.
2. Continue the Soil Safety Program for schools, childcares, parks, and camps.
3. Provide ongoing outreach and education.
4. Encourage cleanup during property development or redevelopment, when soils are already being disturbed.

Settlement Spending (in millions)



### Why It Matters

The plume is over 1,000 square miles. If you live inside the plume (page 3), you could be at risk. Arsenic and lead are toxic. Children are at highest risk because they play in the dirt and put dirty hands in their mouths. Their small bodies are also still developing.

This is a chance to have your voice heard! Your comments can affect how we use our resources and what programs we prioritize. We rely on people to tell us how a cleanup may affect them and their communities.

### Reading Guide Contents

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What part of the plume am I in?

Health Information

Cleanup Plan Focus Areas for:

- Most contaminated areas
- Ruston/North Tacoma Study Area
- Less contaminated areas
- Planners, developers, and consultants
- Parents, teachers, and childcares

How to Provide Comments

### Public Comment Period

October 20–December 20, 2011

Submit Comments and Questions to:

Cynthia Walker, Project Manager  
Toxics Cleanup Program, SWRO  
PO Box 47775  
Olympia, WA 98504-7775  
E-mail: [Cynthia.Walker@ecy.wa.gov](mailto:Cynthia.Walker@ecy.wa.gov)

Where to find the cleanup plan:

Please check with your local library. They will have either a hard copy or show you how to find it online.

SW Regional Office, Dept. of Ecology  
300 Desmond Drive  
Lacey, WA  
Contact Debbie Nelson at  
[Debbie.Nelson@ecy.wa.gov](mailto:Debbie.Nelson@ecy.wa.gov) or  
360-407-6365

Ecology’s website:

<http://www.ecy.wa.gov/toxics/tacoma-smelter.html>

### What Part of the Plume Am I In?

See page 3 or visit Ecology's website for a link to a map that allows you to search your address.

Some parts of the plume have higher levels of arsenic and lead than others. In general, levels depend on distance and wind direction from the former smelter. The shape of the land surface and age of housing also impacts levels.

In 2012, Ecology will put out a new map that better predicts where arsenic might be high—over 100 parts per million (ppm). We will use this map to figure out what neighborhoods need soil sampling.

**Note:** The map cannot tell you whether your yard is contaminated. Soil sampling is the only way to know for certain.

### Health Information

**Arsenic:** Scientists have linked long-term exposure to arsenic to many health problems. They include heart disease, diabetes, and cancer of the bladder, lung, skin, kidney, liver, and prostate.

**Lead:** In children, lead can cause behavior problems like hyperactivity, developmental delays, and reduced growth.

In adults, lead can increase blood pressure, affect memory, and add to other health problems.

### Protect Yourself With Healthy Actions!

Simple actions like washing hands and taking shoes off at the door reduce your contact with soil. See the back page for more information.



### WHAT PART OF THE CLEANUP PLAN TO FOCUS ON

Chapter 1 gives an overview of the cleanup plan. For the history of the Tacoma Smelter Plume, read Chapters 2 and 3. Depending on your interests, focus areas are described below. Each focus area gives the chapters covering the topic, and questions we would like your input on.

#### Decisions you can influence

This is still a draft plan. We may make changes based on your comments. Besides the questions listed in each section, here are some key areas to comment on:

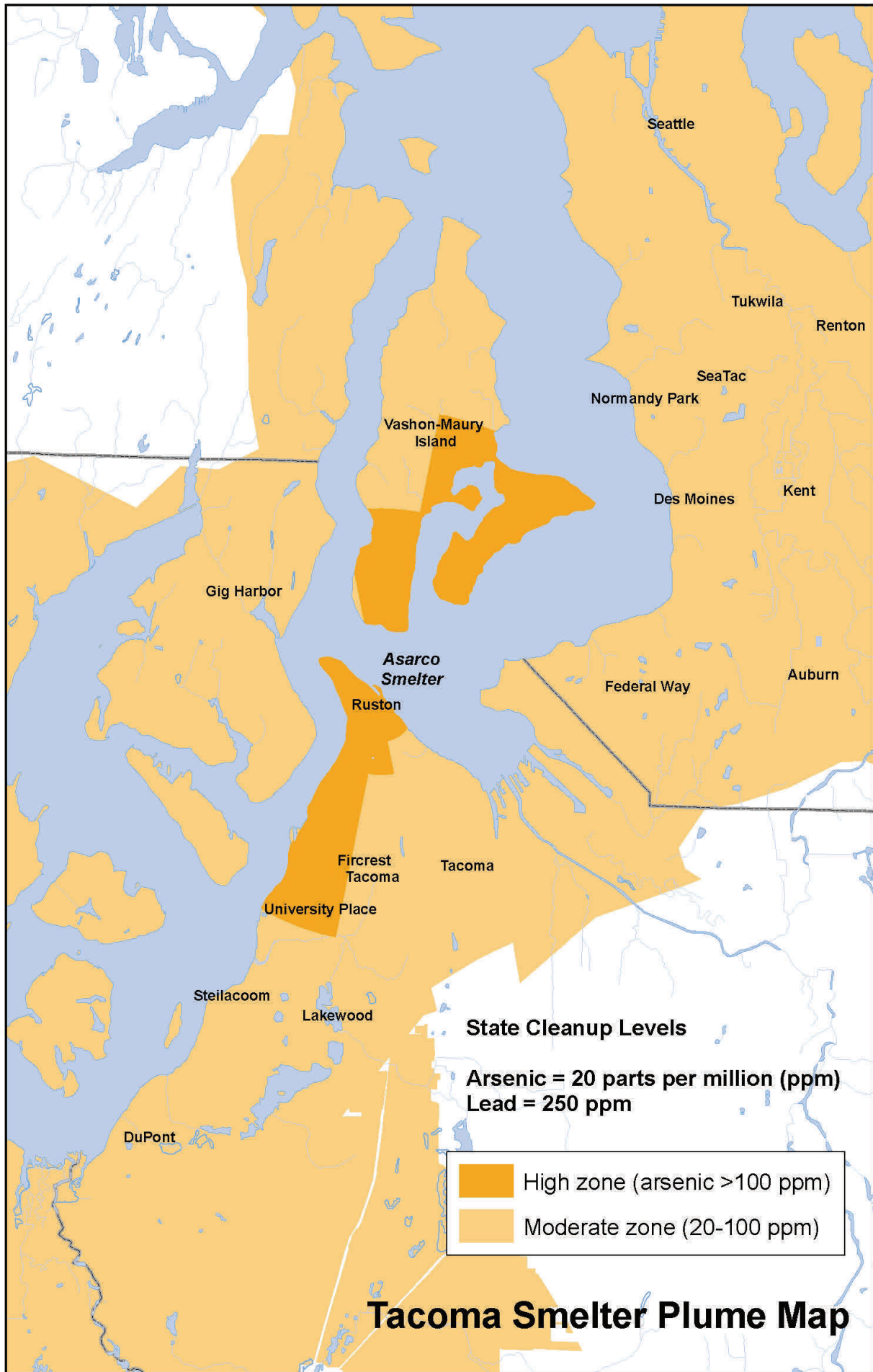
- Should Ecology spend the settlement mainly on soil sampling and cleanup (page 1 figure)?
- Should we focus on yards in the most contaminated zone (page 3) and play areas?
- How can we improve our outreach and reach people in the less contaminated areas?
- Should we encourage or require sampling and cleanup during development?
- How can we help educate homebuyers?
- What other ideas should we look at for Phase Two?

### People Living in the Most Contaminated Areas (High Zone)

#### How this impacts you

If you live in the high zone (page 3), Ecology plans to offer you free soil sampling. We can sample at houses, condos, and apartment buildings. We will offer you free yard cleanup if we find any of the following:

- Average **arsenic** over 100 parts per million (ppm).
- A single sample with **arsenic** over 200 ppm.
- Average **lead** over 500 ppm.



- A single sample with **lead** over 1,000 ppm. You will also receive outreach about actions to reduce exposure. See the back page for how to get brochures, nail brushes, and other items.

### You may want to comment on...

**Chapter 6** - How the yard sampling and cleanup program works.

- Would you like Ecology to do the sampling and cleanup for you? What other options should Ecology consider?
- What would you like us to keep in mind as we design the program? What questions do you have about the proposed program?
- Do you need more information about keeping your family safe in the meantime?

## Ruston/North Tacoma Study Area

### How this impacts you

If your home is inside the Ruston/North Tacoma Study Area of the Superfund site, the U.S. Environmental Protection Agency (EPA) likely has already taken soil samples.

If arsenic levels were over 230 parts per million (ppm), EPA likely cleaned up that part of your yard already. **If arsenic levels are between 100 ppm and 230 ppm, Ecology may be able to clean up your yard.**

To see your sampling results or find out whether EPA cleaned up your yard, please contact Karen Pickett at (253) 759-3332 or [Karen.Pickett@eigov.us](mailto:Karen.Pickett@eigov.us).

### You may want to comment on...

**Chapter 6** - How the yard sampling and cleanup program works.

- If asked, would you be willing to let Ecology do cleanup in your yard? What if EPA already cleaned up part of your yard?
- What would you like us to keep in mind as we design the program?
- Do you need more information about keeping your family safe?

## People Living in the Less Contaminated Areas (Moderate Zone)

### How this impacts you

If you live in the plume but outside of the high zone (page 3), Ecology will provide outreach. You can take simple, healthy actions to lower your exposure to soil. See the back page for how to get brochures, nail brushes, and other items.

### You may want to comment on...

**Chapters 1 and 5** - Ecology's general plan for managing risk. We plan to focus the most resources on the most contaminated areas and not where you live.

- What would convince you to take the healthy actions listed on the back page?
- What outreach tools should we use?
- Are there certain groups of people that need outreach? How can we best reach them?

## Planning and Permit Offices, Developers, and Consultants

### How this impacts you

This plan includes soil sampling and cleanup guidance. We came up with a set of five "model remedies." You can use these to clean up Tacoma Smelter Plume contamination. Cleanups following the guidance can receive Ecology approval.

We strongly encourage using the guidance during development projects. You can often do soil cleanup during grading, digging, and paving.

Some permit offices may require soil sampling and cleanup as a permit condition. Our guidance can help streamline this process. We are also looking at "Phase Two" ideas for developments and land managed by other agencies.

### You may want to comment on...

**Chapter 11 and Appendix B** - Chapter 11 lays out the model remedies. It is a very technical chapter. Appendix B is the more user-friendly guidance.

- Should Ecology focus most of its resources on cleaning up yards and play areas, rather than new developments?
- Would you use the guidance? If not, why?
- What resources would help you get sampling and cleanup done during your project?

**Chapter 7** - Phase Two ideas Ecology is looking for input on. One idea is to broadly require sampling and cleanup during development.

- Should Ecology try to require soil sampling and cleanup during development?

### Real Estate Agents, Homebuyers, Sellers, and Lenders

**Chapter 6 - Section 6.4.4** discusses a database Ecology plans to use to track sample results and cleanup on residential properties.

**Chapter 7** - Ideas include educating homebuyers, real estate agents, and lenders about soil contamination.

- How can we ensure real estate agents and homebuyers are aware of risks from contaminated soil?
- How can we get buyers and real estate agents to use the Ecology database?
- Should real estate disclosure form 17 be changed to include arsenic and lead contamination from the Tacoma Smelter Plume?
- Should state law be changed to require soil sampling prior to sale?

### Parents, Teachers, and Childcare Providers

#### How this impacts you

We are continuing the Soil Safety Program. It provides free soil sampling and cleanup for play areas at schools, childcares, parks, camps, and

multi-family public housing. Please visit our website for more on this program (see page 1).

We are also continuing our outreach programs, many of which target children and the people that care for them. Local health departments in Pierce and Thurston counties provide outreach locally. Right now, Ecology is doing outreach for King County.

See the back page for more on the Soil Safety Program and how to get brochures, nail brushes, and other items.

#### You may want to comment on...

**Chapters 1 and 5** - Ecology's plan for continuing outreach and the Soil Safety Program.

- Should Ecology continue the Soil Safety Program for at least the next 10 years?
- Should we clean up just play areas so we have enough funding to clean up yards?
- What kind of information do you need to help protect children in your care?
- What outreach tools work best for you?

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### How to Provide Comments

Put your comments in writing and send them to Cynthia Walker at the address or e-mail address listed on page 1. Be sure to:

- Review the parts of the cleanup plan that may affect you.
- Write comments that are focused and relate to something in the cleanup plan.
- Refer to sections of the cleanup plan so we can better understand your comments.
- Send your comments to us by December 20, 2011.

### Dirt Alert! Outreach Information

For more information or to request outreach materials, please contact

- **For King County** - Hannah Aoyagi (Department of Ecology) at [Hannah.Aoyagi@ecy.wa.gov](mailto:Hannah.Aoyagi@ecy.wa.gov) or 360-407-6790. Website: <http://www.ecy.wa.gov/toxics/tacoma-smelter.html>
- **For Pierce County** - Tacoma-Pierce County Health Department at [DirtAlert@tpchd.org](mailto:DirtAlert@tpchd.org) or 253-798-6492. Website: <http://www.tpchd.org/DirtAlert>
- **For Thurston County** - Thurston County Public Health at 360-867-2586. Website: <http://www.co.thurston.wa.us/health/ehsp/index.html>

## Healthy Actions Can Help Reduce Your Exposure to Soil



**Wash your hands well** before eating and after working or playing in the soil. Use a scrub brush to clean dirt from under your nails.



**Mop, damp dust and vacuum often** to remove dirt tracked in from outside.



**Wash fruits and vegetables** grown at home before eating them to remove soil that may be on the surface. Grow vegetables in raised beds.



**Take your shoes off** in the house so you don't track dirt in from outside.



**Use caution if working** with soil. Wear gloves and wash dirty clothes separately.



**Keep pets clean.** Wipe off excess dirt and mud before your pet comes inside. Brush and bathe your pet often. Give pets their own beds.

### Where to find the cleanup plan:

On Ecology's website: <http://www.ecy.wa.gov/toxics/tacoma-smelter.html>

Your local library will have either a hard copy or show you how to find it online.