

Soil Safety at Federal Way Parks

Three parks in Federal Way have some Tacoma Smelter Plume soil contamination in their woods. Arsenic and lead from the old Asarco copper smelter in north Tacoma traveled with the wind and landed on soils over a large area (see map on page 3).

In 2009, the State of Washington received a \$94 million settlement from Asarco for environmental damage from its Tacoma smelter. The Department of Ecology is using some of this money for the Soil Safety Program.

The Soil Safety Program

Ecology samples and cleans up play areas at schools, childcares, parks, and camps. We have finished most of the school and child-care cleanups and now we are working on parks!

Which parks have contamination?

The state cleanup level for arsenic is 20 parts per million (ppm) and lead is 250 ppm. Background levels for arsenic are around 7 ppm and 24 ppm for lead.

- **Lake Grove** - Outside of the play area, the park has average arsenic over 20 ppm and one spot with very high lead.
- **Adelaide** - Average arsenic and lead are below state cleanup levels. One spot had 44 ppm arsenic.
- **Heritage Woods** - Average arsenic and lead are below state cleanup levels. One spot had 54 ppm arsenic.

See page 2 for details on what we plan to do next, and for a list of other parks we sampled.

What are the health risks?

Tacoma Smelter Plume contamination levels **do not pose an immediate health threat**. However, we do recommend using the Healthy Actions listed at the top right because...

Long-term exposure to **arsenic** can contribute to heart disease, diabetes, and cancers of the lung, bladder, skin, and prostate. The additional lifetime cancer risk from exposure to 20 ppm arsenic is 30 in one million.

Lead is especially harmful for children under age six. It can cause permanent damage to the developing nervous system and

Healthy Actions



Please continue to enjoy your parks! You can use Healthy Actions to protect your family from contaminated soil:

- Wash hands after working or playing outside.
- Take off shoes or use a doormat.
- Vacuum and damp dust regularly.
- Keep children's toys free of dirt.
- Wash fruits and vegetables from your garden.

More Information

Soil Safety Program cleanups

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Free home soil testing and outreach

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Tacoma Smelter Plume website

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

Federal Way Parks

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Facility Site ID #: 89267963

lead to behavioral problems. Lead risk is more complex to explain. For more on risk, see <http://www.ecy.wa.gov/pubs/1109095.pdf>.

Lake Grove Park

The arsenic and lead are in the woods. One area has very high levels of lead we suspect are from a different source. We plan to dig out the most contaminated soils and replace them with clean soils and new sod.

Digging in the woods might damage the trees. For areas with lower levels, we will leave contamination in place and put up signs encouraging people to stay on paths and take Healthy Actions (see page 1).



Lake Grove Park woods

Adelaide and Heritage Woods Parks

At both parks, only one sample out of many had elevated arsenic and it was outside of the play area. We will provide signs to let people know about the risks and how to limit their exposure using Healthy Actions (see page 1).

Other Federal Way Parks

The following parks have arsenic and lead below cleanup levels:

- Alderbrook
- Alderdale
- Dash Point Highlands
- French Lake
- Mirror Lake
- Olympic View

Why It Matters

Ecology is focusing first on areas where children play. Children are more at risk from arsenic and lead in soil than adults.

They spend more time closer to the ground and often put their dirty hands and toys into their mouths.

Their growing bodies are also more vulnerable to the effects of arsenic and lead.



- Palisades
- Sacajawea
- Saghalie
- Steel Lake
- Steel Lake Annex

Do I Live inside the Tacoma Smelter Plume?

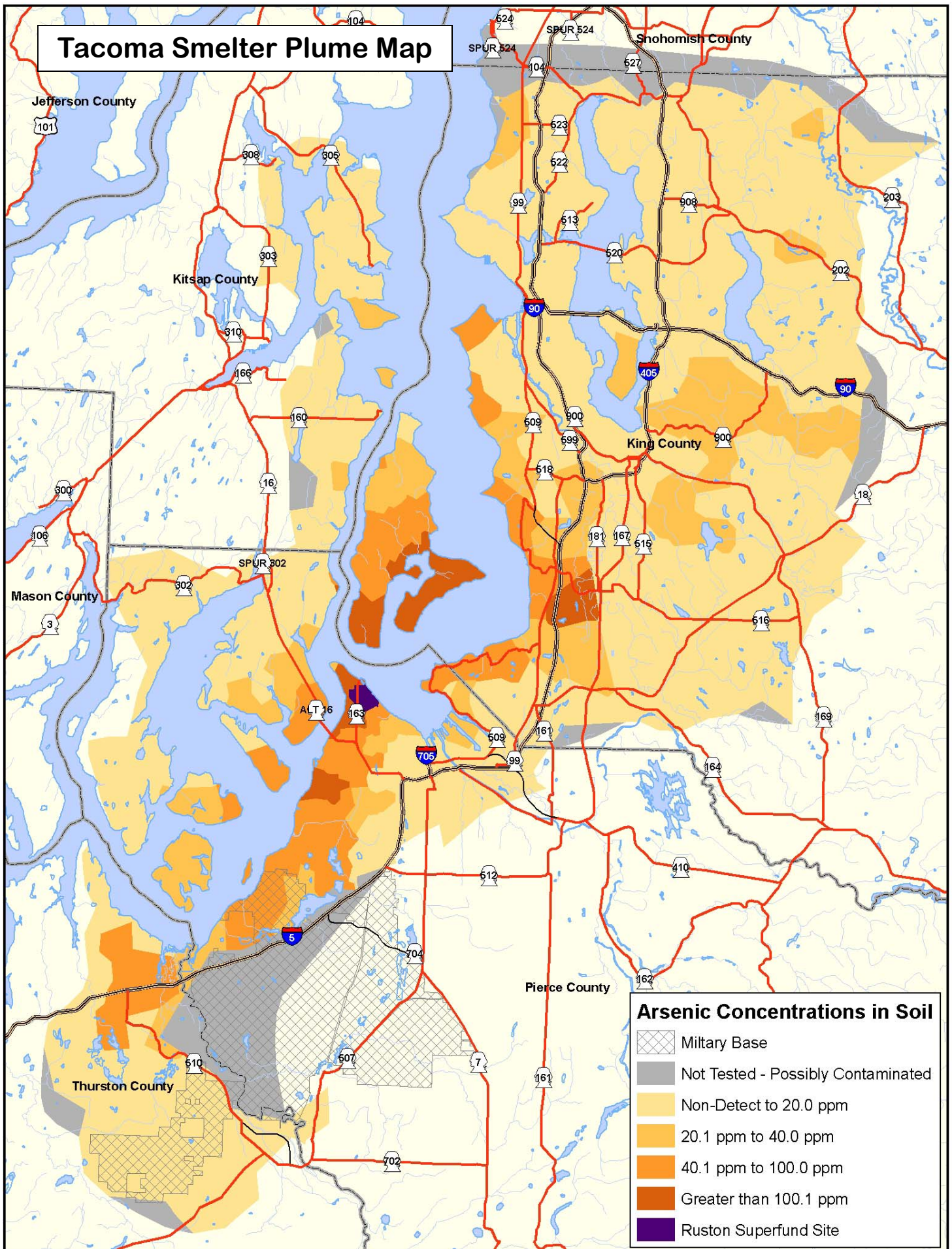
If you live near one of the parks listed in this fact sheet, you are likely inside the plume. For a link to an interactive map, please visit our homepage <http://www.ecy.wa.gov/toxics/tacoma-smelter.html>

How can I find out what's in my soil?







This summer, Ecology is starting a free home soil testing program in King County. Please contact us to sign up (see box on front).

Whether you know what's in your soil or not, we recommend covering bare patches of dirt, maintaining good grass cover, and growing vegetables in garden boxes.

Tacoma Smelter Plume Map



Arsenic Concentrations in Soil

-  Military Base
-  Not Tested - Possibly Contaminated
-  Non-Detect to 20.0 ppm
-  20.1 ppm to 40.0 ppm
-  40.1 ppm to 100.0 ppm
-  Greater than 100.1 ppm
-  Ruston Superfund Site




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or (360) 407-6255 to join
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Tacoma Smelter Plume Soil Safety Program King County, WA

**What we're doing about arsenic
and lead soil contamination in
Federal Way parks**



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ington Relay Service. Persons with speech
disability call 877-833-6341.

**Come to an open house at your
neighborhood park to learn more...**

Wed. July 11, 2012, 6:30—7:30 p.m.

@ Heritage Woods Park, 28200 24th Place S

Wed. July 18, 2012, 6:30—7:30 p.m.

@ Adelaide Park, 30916 16th Avenue SW

Wed. August 1, 2012, 6:30—7:30 p.m.

@ Lake Grove Park, 833 SW 308th Street