

Tacoma Smelter Plume 2020 Yard Program

**Pre-construction meeting
Washington Department of Ecology**



Topics

- Timeline
- Prepare yard area
- Access
- Safety
- Homeowner responsibilities
- Project Line



Yard Program

- Existing residential property
- State-led
- Voluntary

- Arsenic action level = 100 ppm
- Lead action level = 500 ppm

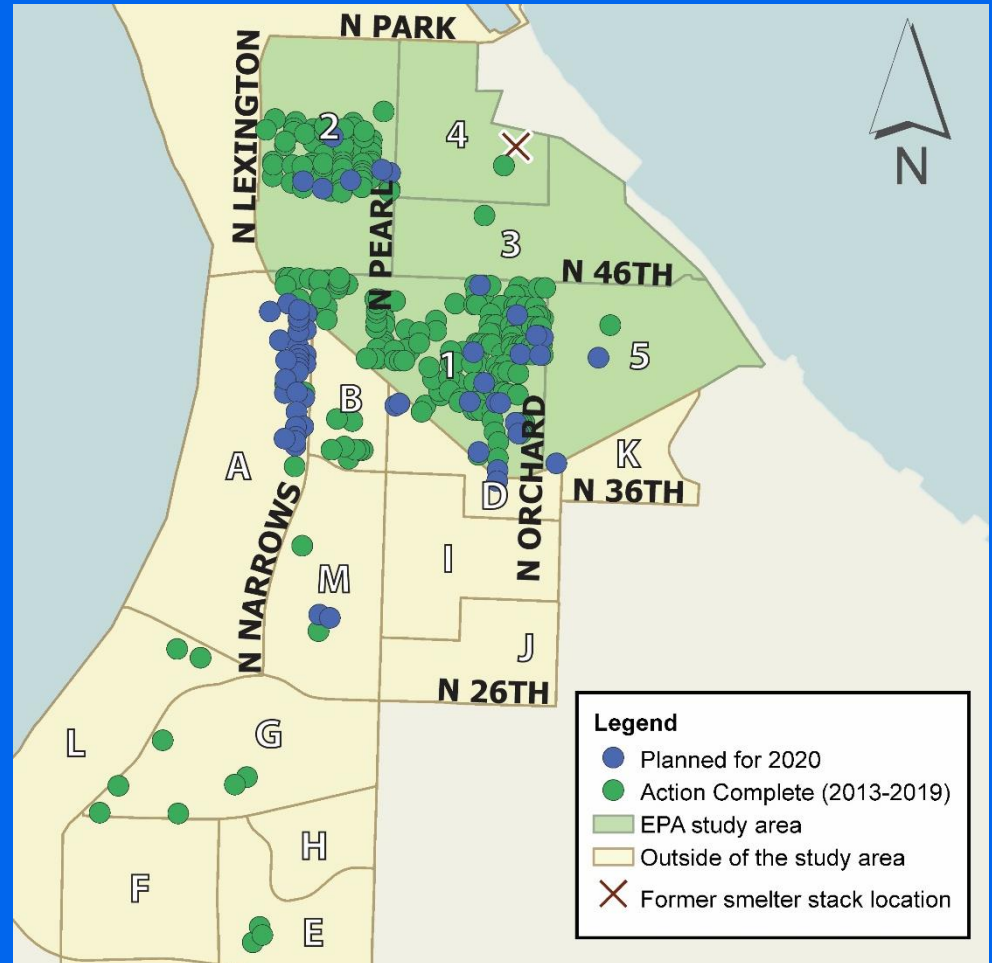


Soil Replacement– Tacoma

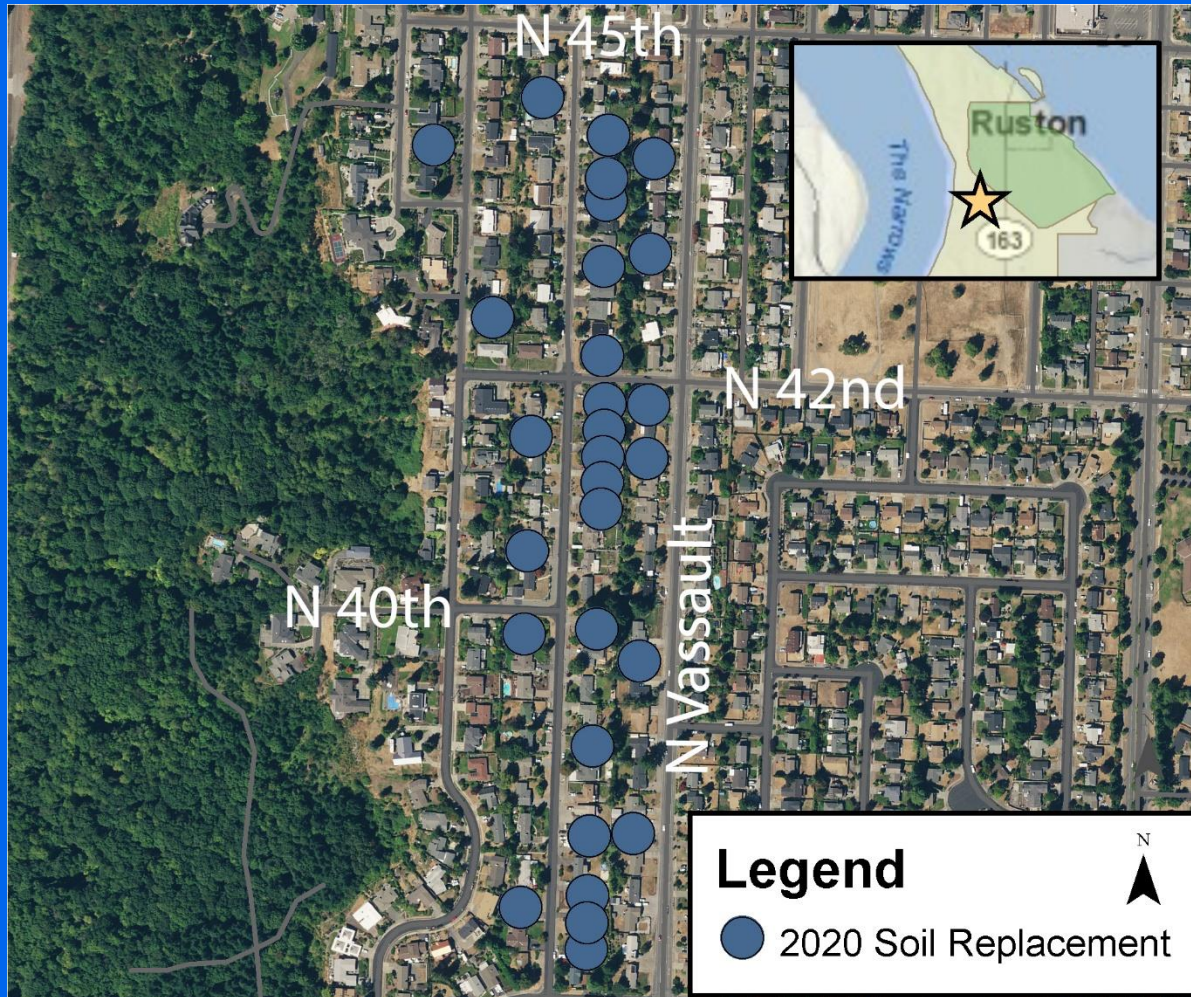
Completed:
2013-2019

Total: 255 yards

Upcoming:
2020- ~ 58 yards



Soil Replacement– 2020



Prepare Yard

Clear personal items

- Children's play equipment
- Lawn furniture
- Potted plants
- Gardening tools
- Other misc. items



What to expect during construction

Work hours:

- 8:00 a.m.-5 p.m.
- Monday through Friday

*Saturdays with permission from Ecology



Traffic and Noise

- Trucks & equipment
- Construction noise
- Cars parked on roads
- Restricted access



Maintain Access

- Driveways
- Side yards
- Gates
- Alleys



Safety

- Make accommodations for pets.
- Stay out of fenced area and off equipment.
- Call us immediately if you have any safety concerns.



Contractor Timeline



Ecology Field Staff



Aaron Waggoner
GeoEngineers
Field Oversight
Coordinator



Amy Hargrove
Remediation
Manager



Jackson Barnes
Field Oversight
Coordinator

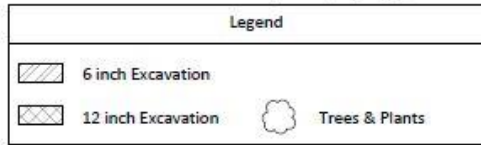
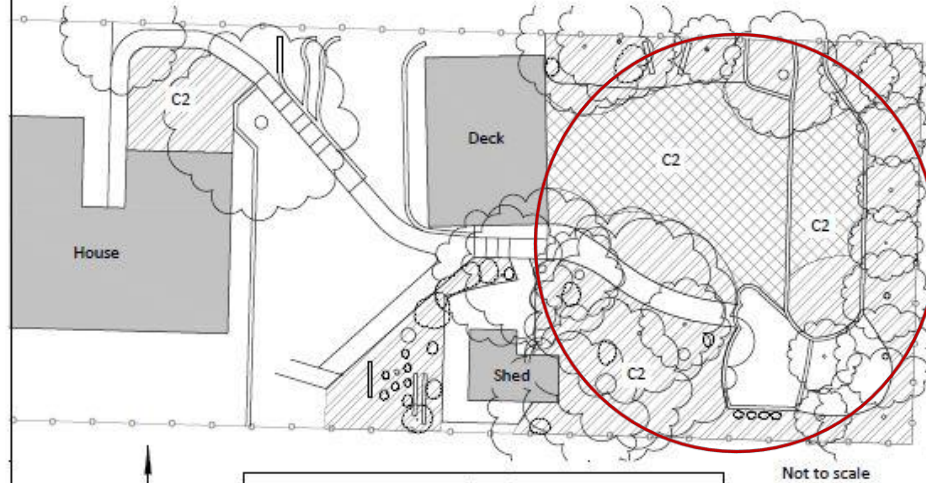
Soil Replacement Process



Soil sampling at the base of excavation



Soil Replacement Actions



Not to scale

Completed Actions:

- Excavated in the backyard:
 - 12 inches in depth in open areas.
 - 6 inches around shrubs to protect root zones.
 - 6 inches near the house to protect the foundation.
- Collected soil samples at the base of excavation in the backyard. Sample results are presented in the table. Sample results indicated that concentrations remain above the state cleanup levels in shallow excavation but below state cleanup levels where depth was reached.
- Backfilled the excavation with imported topsoil.
- Covered imported topsoil with sod and black mulch.

Unit	Depth (inches)	Arsenic (ppm)	Lead (ppm)	Geotextile Placed
Backyard - Root zone (C2)	6	140	230	No
Backyard (C2)	12	13	17	No

ppm = parts per million

State Cleanup Levels: Arsenic = 20 ppm, Lead = 250 ppm

Note: Arsenic and/or lead concentrations greater than the state cleanup levels may remain in areas where full excavation depth was not achieved, and work was not performed. This includes areas outside of the replacement actions, and areas near fences, trees, shrubs, concrete patios/walkways, retaining walls and house foundations. If working in these areas in the future, use healthy actions and maintain cover material.

Date: 8/16/2018

*Map feature locations and depths of excavation are approximate.

Soil Replacement Actions

Base of Excavation Sample Results

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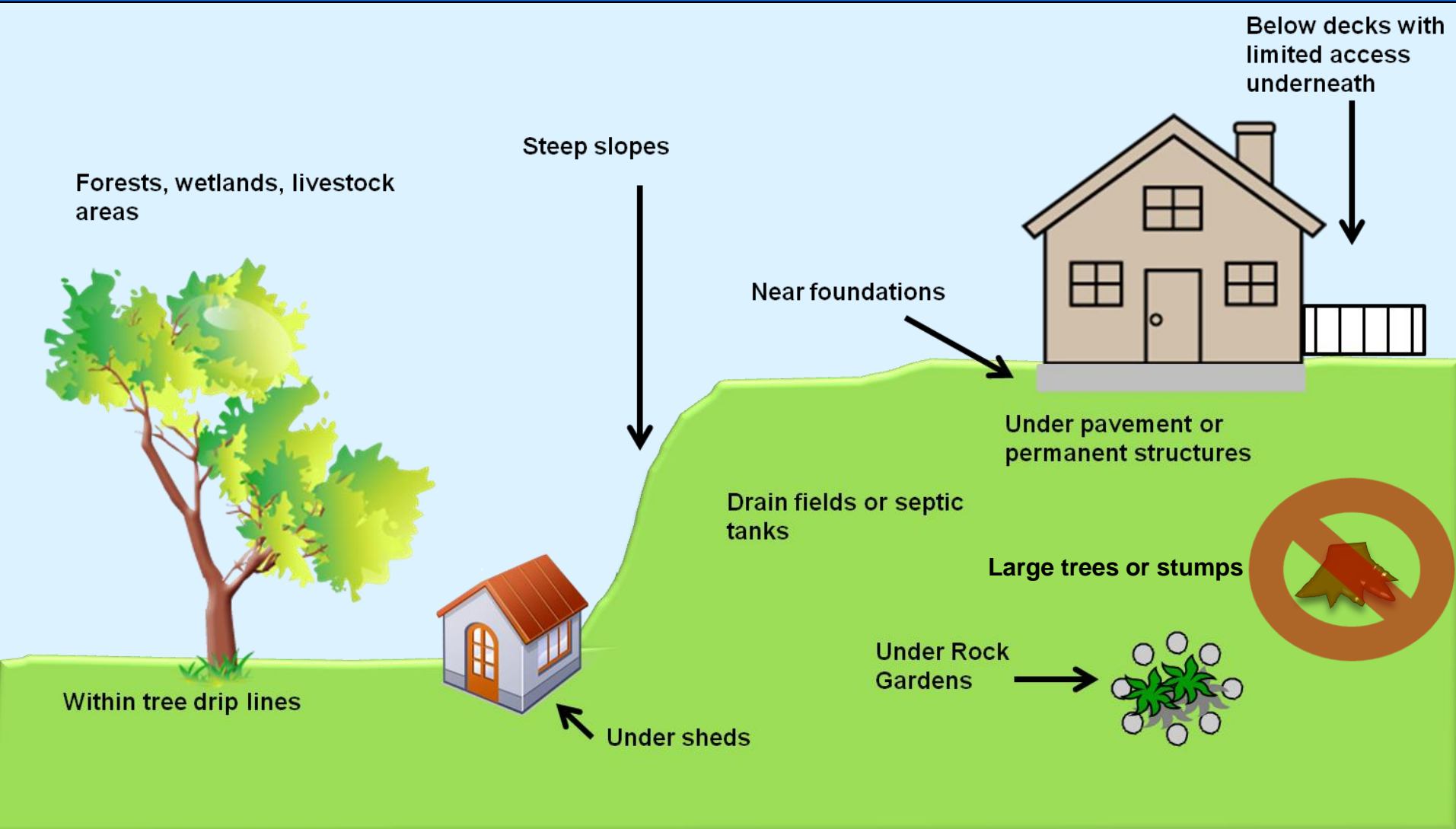
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Soil Replacement Process



Areas that are Excluded



Set-backs

We set-back from:

- Underground storage tanks
- Retaining walls
- Driveways & pathways
- Fences
- Utilities
- Shrubs & plants



Sprinkler Systems

The contractor is required to protect or restore your sprinkler to pre-construction, working order.



Landscape Restoration



Landscape Care



Call Ecology if you see any of the following:

(360) 407-7688, press 2 for Tacoma Smelter Plume

Puddles on grass

Check for puddles that last more than 48 hours after a large rain event.



Soft or settled soil

After winter rains, check for settled or uneven soil that is softer than the rest of the yard.



60 days



New lawn is planted



Contractor cares for landscape and lawn.

Homeowner cares for landscape and lawn.

Lawn Care



Please call us...

- Dust in the air
- Trash pick-up blocked
- Schedule
- Contractor's actions



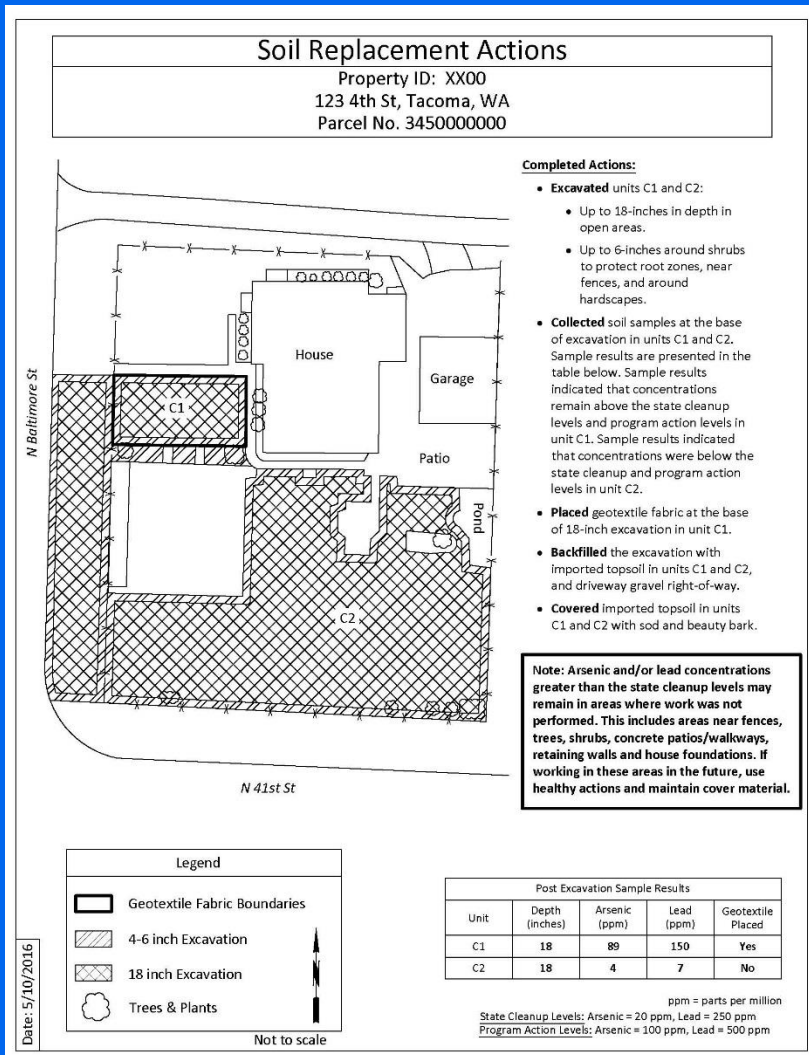
Project Line:

(360) 407-7688

Press 2 for Tacoma Smelter Plume

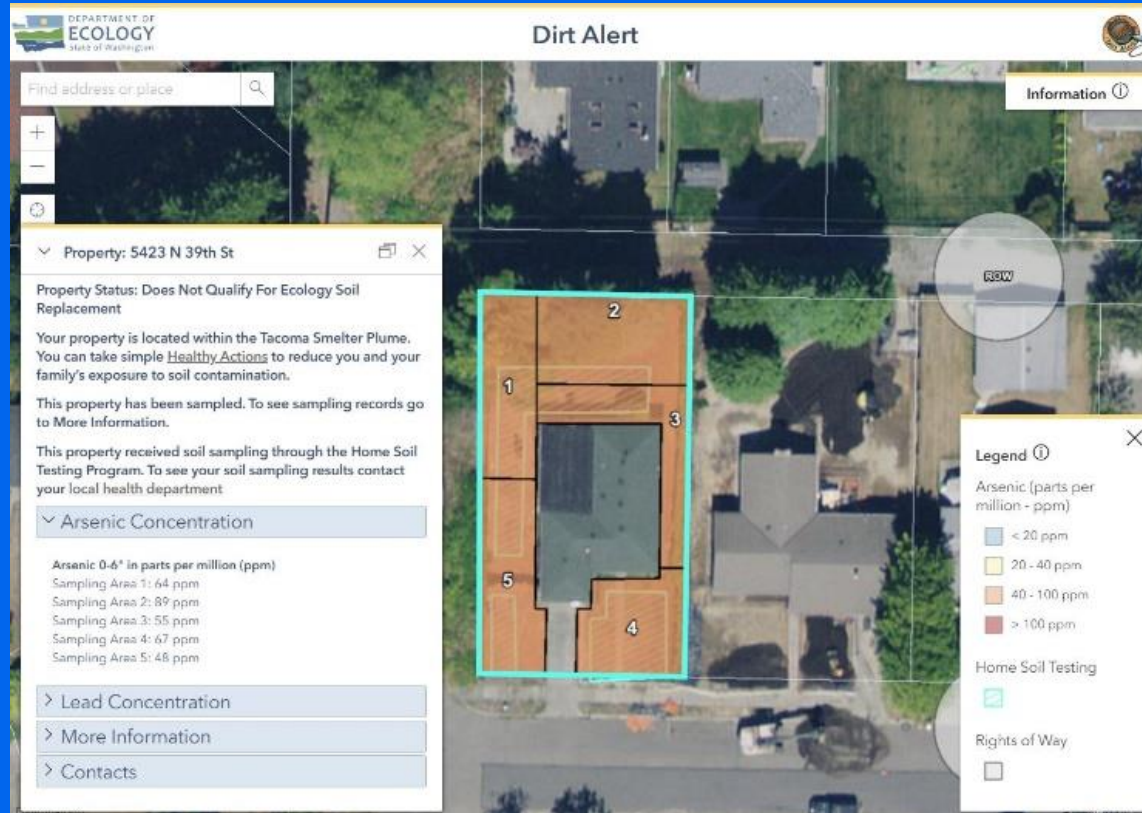
Staff will return all calls within 1 business day

Completion Packet



- Mailed to homeowner. Available on online map and public database.

Dirt Alert Map



apps.ecology.wa.gov/dirtalert/

Dirt Alert Map

The screenshot displays the 'Dirt Alert' web application interface. At the top left is the 'DEPARTMENT OF ECOLOGY State of Washington' logo. The title 'Dirt Alert' is centered at the top. A search bar contains the address '4921 N Defiance St Ta...'. The main map area shows an aerial view of a residential property with a cyan hatched overlay indicating 'New Soil' replacement. The property is divided into seven numbered sections (1-7). A red arrow points to the 'More Information' section in the left-hand information panel, which lists links for 'EPA Document', 'Ecology Completion Letter.pdf', and 'Soil Handling Information'. A legend on the right explains the hatching and color coding for arsenic levels.

Property: 4921 N Defiance St

Property Status: Action Complete (ECY)

Your property is located within the Tacoma Smelter Plume. You can take simple [Healthy Actions](#) to reduce you and your family's exposure to soil contamination.

This property has received [soil replacement](#) through the Department of Ecology. Some areas of soil contamination may remain. To see sampling and soil replacement records go to [More Information](#).

- > Arsenic Concentration
- > Lead Concentration
- > More Information
 - [EPA Document](#)
 - [Ecology Completion Letter.pdf](#)
 - [Soil Handling Information](#)
- > Contacts

Legend

Action Complete (Soil Replacement)

- New Soil

Arsenic (parts per million - ppm)

- < 20 ppm
- 20 - 40 ppm
- 40 - 100 ppm
- > 100 ppm

Rights of Way

-

apps.ecology.wa.gov/dirtalert/

Soil Sampling and Health Questions

Contact

Glenn Rollins

Email: Grollins@tpchd.org

Phone: (253) 798-3503

Website: www.tpchd.org/dirtalert



Yard Program or Soil Safety Questions

Contact

Amy Hargrove

Remediation Manager

Email: Amy.Hargrove@ecy.wa.gov

Phone: (360) 407-6262

Website: <http://ecology.wa.gov/Tacoma-smelter>



Questions?

