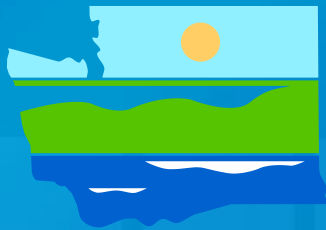


Tacoma Smelter Plume 2016 Yard Program

April 14th & 21st, 2016

Point Defiance Elementary School



DEPARTMENT OF
ECOLOGY
State of Washington

Topics

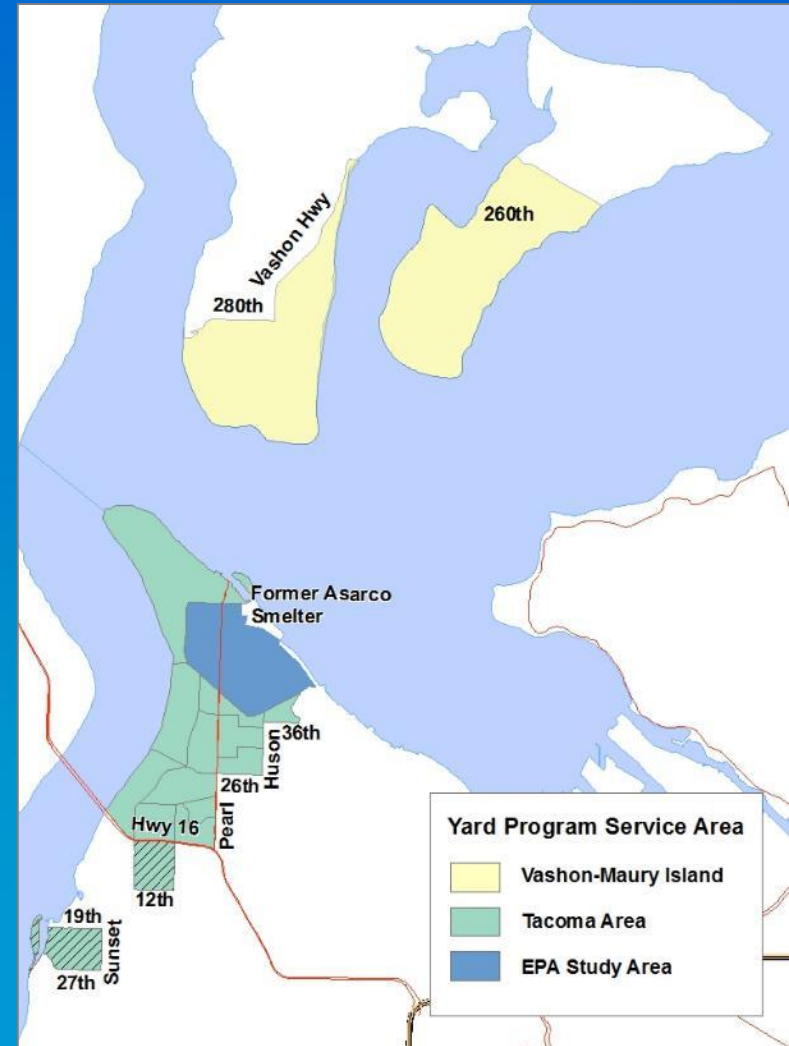
- Timeline
- Prepare yard area
- Maintain access
- Safety
- Lawn care
- Project Line



Yard Program

- Existing residential
- State-led
- Voluntary

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



Soil Replacement Progress – Tacoma

2015

- Soil replacement completed: 71 yards
- Sampling completed: 1,134 yards

2016

- Soil replacement: 80 yards
- Sampling: 500+ yards

2017

- Soil replacement: 85+ yards
- Sampling: Finish all sampling

2018 - 2023

- Continue soil replacement in Tacoma

Soil Replacement Progress – Tacoma

Completed:

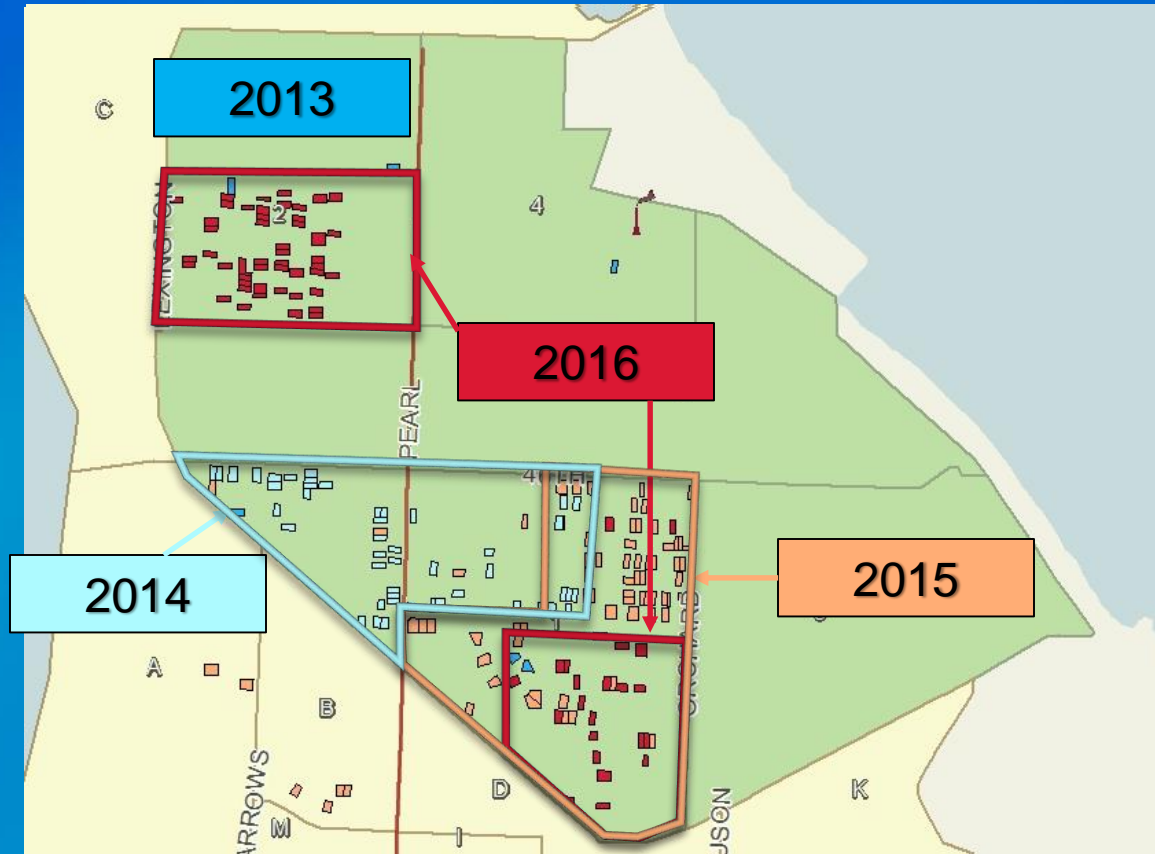
2013 - 8 yards

2014 - 47 yards

2015 - 71 yards

Upcoming:

2016 - 80 yards



Timeline

Hire contractor (Early April)

Contractor submits tentative construction schedule

Site walk through (Minimum 1 week notice)

Soil removal and restoration (8 to 10 weeks)

Lawn maintenance (60 days)

Prepare Yard

Complete yard work

Clear personal items:

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



Maintain Access

- Driveways
- Parking
- Walk ways
- Side yards
- Fences
- Gates
- Alley



Safety

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



What to expect during construction

Work Hours:

- 8:00 am-5:00 pm
- Monday through Friday
- *Saturdays with permission from Ecology



Traffic and Noise

Trucks & equipment:

- Parked overnight

Construction noise:

- Beeping
- Staff talking
- Equipment

Cars parked on street

- During construction sidewalk and driveway access may be restricted



Construction Sites

Piles of soil in yard

Construction fencing:

- Chain link
- Orange safety

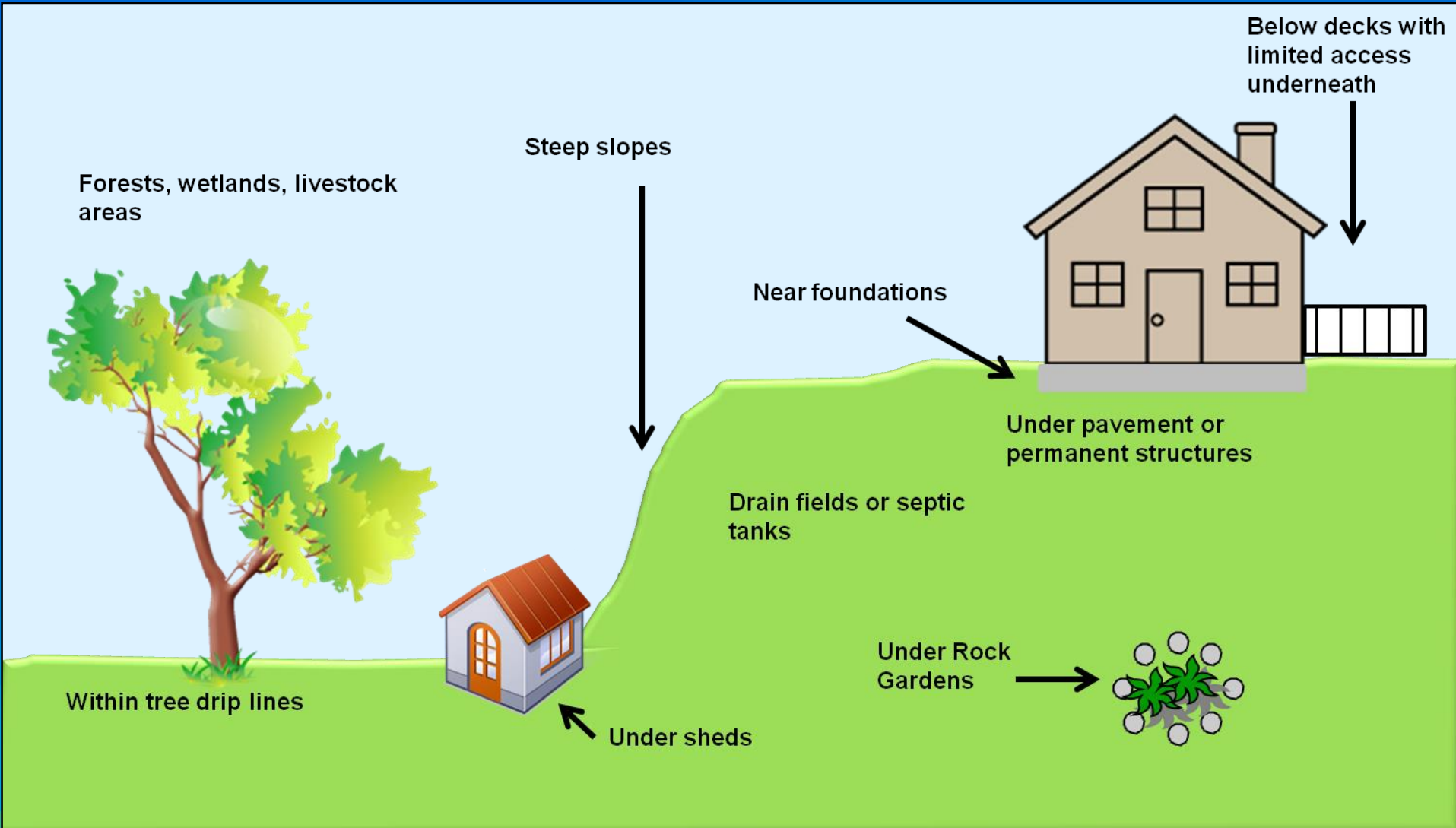
Stormwater controls:

- Straw wattles
- Silt fence
- Plastic sheeting



Signs with Ecology's contact information

Excluded Areas



Tree Critical Root Zones



Release of Liability
Tacoma Smelter Plume
Residential Yard Sampling and Cleanup Program (Yard Program)

Property address: [PROPERTY ADDRESS]
Property owner name: [PROPERTY OWNER NAME]
Parcel number: [PARCEL NUMBER]
Site identification number: [ID #]

Due to limited precipitation and elevated temperatures, trees are distressed and more vulnerable to disease and stress. Our standard approach on excavating beneath trees relies on limiting excavation within the critical root zone (CRZ) of the trees and watering thoroughly within the CRZ to protect the tree from excessive stress during soil replacement.

In order to provide more protection to trees this year, we have modified our approach for excavating near trees as follows:

1. No excavation will be allowed within the CRZ of the tree. This is defined by a radius around the trunk of the tree. The radius is the length of the longest branch(es) of the tree from the tree trunk.
2. If there is bare soil exposed at the ground surface within the CRZ, then mulch will be added here up to 4 inches deep.
3. The area outside of the CRZ, but within a radius of twice the CRZ radius, will be excavated a maximum of 6 inches.
4. Outside of the doubled CRZ the excavation can go to the maximum depth as identified in soil replacement plan agreement.

This modified approach will result in less contaminated soil being removed from your yard.

I, [PROPERTY OWNER NAME], have requested Ecology not modify its approach for excavation around trees on my property at [PROPERTY ADDRESS]. I acknowledge that excavation closer to the CRZ may impact the stressed trees on my property, and there is a risk of killing the trees.

I agree to indemnify and hold Ecology, its employees, and its contractor harmless against any claim regarding the loss or damage which may result from soil excavation closer to the CRZ of the trees on my property.

[PROPERTY OWNER NAME]

Date

Setbacks

We set-back from:

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



Sprinkler Systems

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



Construction



Restoration



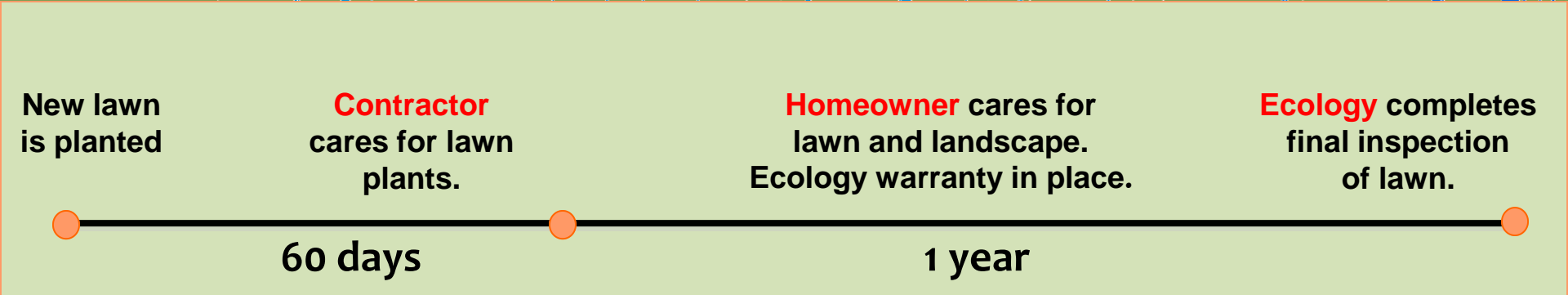
Lawn Care

Contractor cares for lawn and plants:

- Until new lawn is established
- Estimated 60 days



Homeowner maintains lawn



On-going lawn care

Homeowner cares for new lawn:

- Water new plants or grass
- Weed regularly
- Replenish mulch
- Add fertilizers as needed
- Pick up pet waste



Call Ecology immediately if you notice a problem with your plants or lawn.

Please call us if you see...

- Mud or water running off property
- Dust in the air
- Soil on the sidewalk or street



When to call Ecology...



Before Soil Removal and Replacement

- Questions about what items to move
- Questions about timeline



During Soil Removal and Replacement

- Questions about schedule
- Questions about work details



After Soil Removal and Replacement

- Dead grass, rolled up sod, standing water
- Soft or settled soil

Tacoma Smelter Plume

Project Line

(360) 407-7688

Press 2 for Tacoma Smelter Plume

Staff will return calls within 1 business day



DEPARTMENT OF
ECOLOGY
State of Washington

Field Staff



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(360) 407-6248



Arsenic in Soil Database



Arsenic in Soil (AREIS)

Find Property



[Information about arsenic and lead](#)

[Healthy Actions to reduce contact with soil](#)

Contact
360-407-7688
Press 2 for Tacoma Smelter Plume

Project Information

Arsenic and lead in the soil

The mining company Asarco once operated two copper smelters in Washington State; in Everett and Tacoma. Emissions of arsenic and lead contaminated soils for miles around the former stacks.

The [Tacoma Smelter Plume](#) covers 1,000 square miles of King, Pierce, and Thurston counties. Ecology and [EPA](#) have been cleaning up yards and play areas in Tacoma since 1993. The [Everett Smelter](#) contaminated a one square mile area in north Everett. Ecology has been cleaning up yards in Everett since 1999.

Search here for soil sampling results and cleanup records!

Right now, the database only has records for 2,000 properties in Ruston and north Tacoma.

1. Enter your address or parcel number and click "search."
2. You will see a map of the area.
3. The property you searched for should be in the center of the screen. Click on the dot, check the address and see what records are available.

I can't find my property/I live outside of north Tacoma

Within the next year, we plan to add records for the Everett smelter cleanup and more areas of the Tacoma Smelter Plume.

Search for a Property

 Address search

(do not include the city or state)

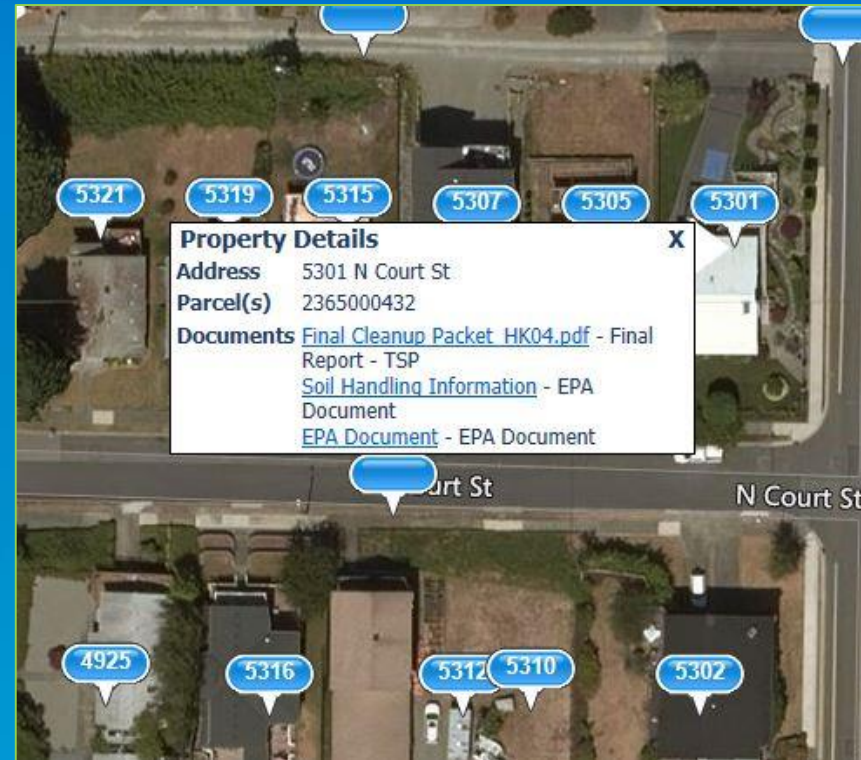
- OR -

 Parcel search

Arsenic in Soil Database

Information:

- Results map & letter
- Cleanup documentation



Health Questions



Contact

Jeremy Bush

Email: jbush@tpchd.org

Phone: (253) 255-8135

Gregory Tanbara

gtanbara@tpchd.org

Phone: (253) 798-4784

Website: www.dirtalert.info

Questions?



Contact

Crescent Calimpong, Outreach Coordinator

Email: Crescent.Calimpong@ecy.wa.gov

Phone: (360) 407-6790

Amy Hargrove, Remediation Manager

Email: Amy.Hargrove@ecy.wa.gov

Phone: (360) 407-6762

Website: ecy.wa.gov/toxics/tacoma-smelter.html



Questions?