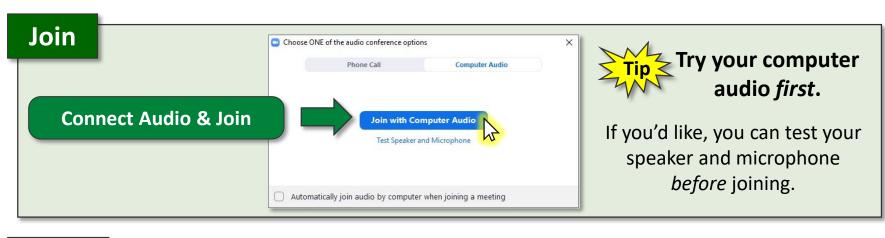


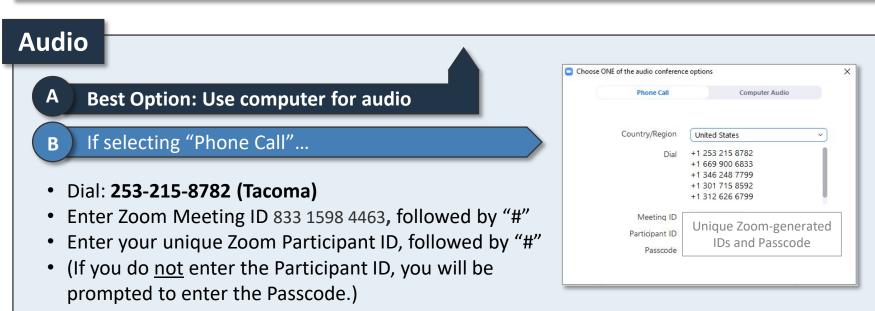


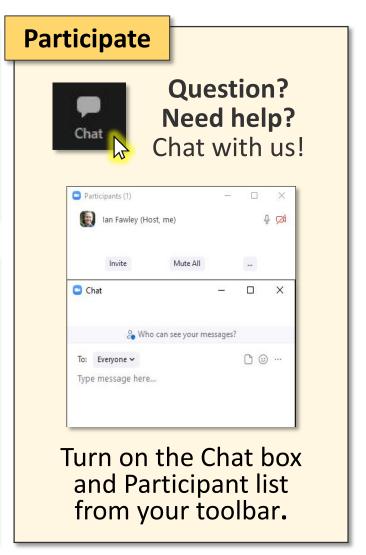
Welcome to our online meeting

We will start our presentation shortly.

No sound? We will unmute soon for sound checks.











Rainier Mall Cleanup Site

Toxics Cleanup Program - Northwest Regional Office April 6, 2022

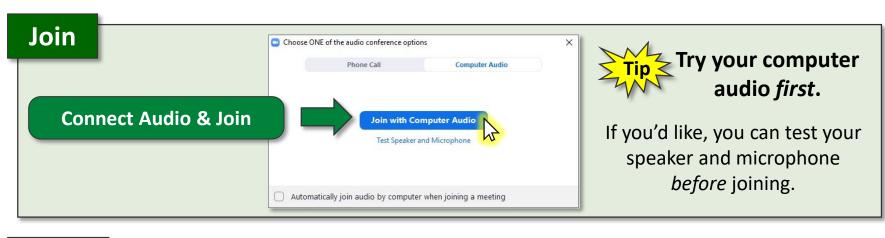


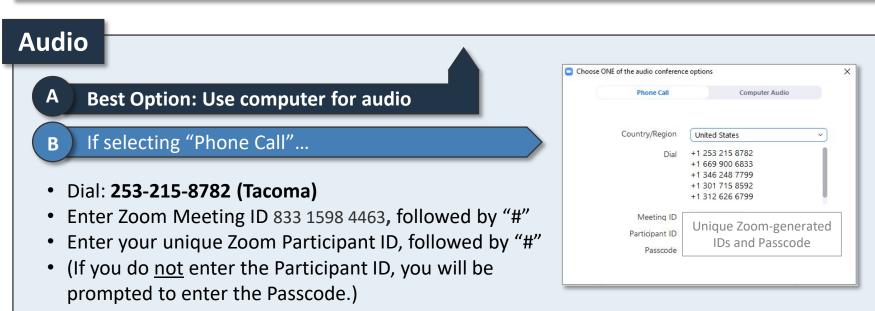


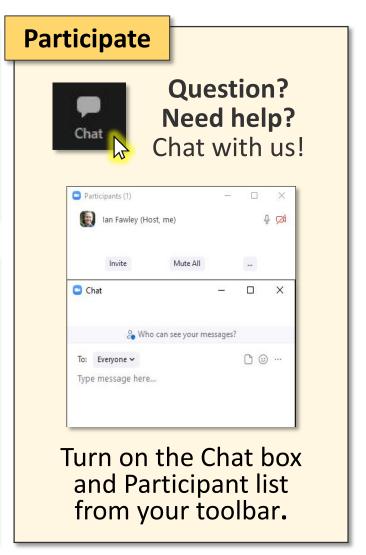
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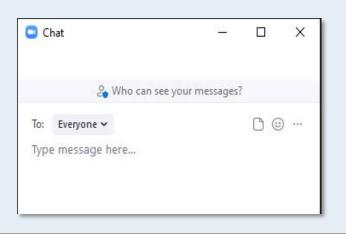
Participation in Online Public Meeting





You can ask questions via the chat function







Facilitators will read your typed questions

Our presentation team will either:

- 1. Answer your questions throughout the presentation.
- 2. Collect your questions for the Q/A session at the end.

-OR-





Ian Fawley

Kelsey Ketcheson







Agenda

6:30 - 7:00 p.m.

- Welcome, Online Meeting Flow, Introductions
- MTCA Cleanup Process
- Project Overview
- Site Discussion
 - Site History & Remedial Investigation
 - Feasibility Study & Selected Remedy
- Next Steps
- How to Comment

7:00 - 7:30 p.m.

Questions/Answers





Introductions Department of Ecology

Site Manager: Tanner Bushnell PE

Project Manager: Sandra Matthews LG, LHG

Community Outreach: Kelsey Ketcheson

Community Outreach: Ian Fawley





Project proponents

Rainier and Genesse LLC



Lake Union Partners

Norah Potter- Project Manager



Community Roots Housing

Jeremy Wilkening - Vice President of Real Estate Development



Consultant- Urban Environmental Partners

John Funderburk III - Managing Partner, Principal



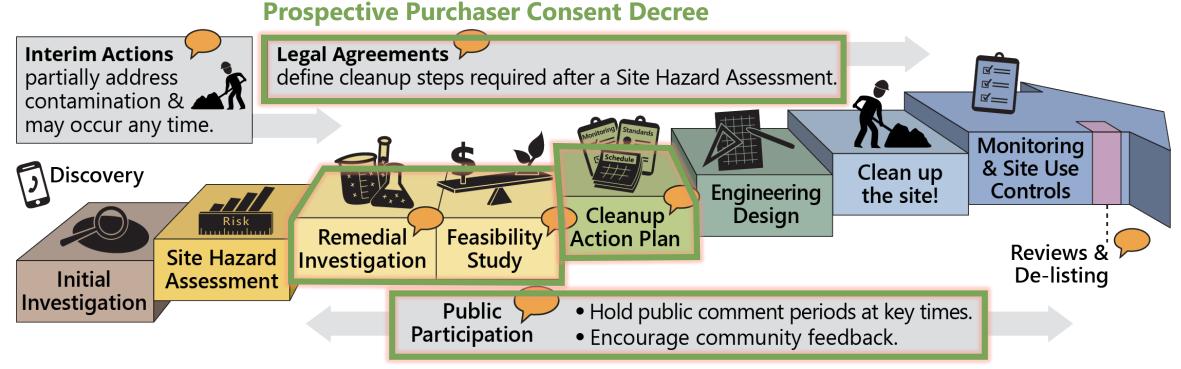
Consultant- Dixon Environmental Services

Brian Dixon - President / Principal Environmental Scientist



Model Toxics Control Act (MTCA)

Washington's Formal Cleanup Process



Public review documents:

- Prospective Purchaser Consent Decree
- Remedial Investigation & Feasibility
 Study

- Draft Cleanup Action Plan
- Public Participation Plan

SEPA Determination







Documents for comment

- Prospective Purchaser Consent Decree (PPCD)
- Public Participation Plan
- Remedial Investigation / Feasibility Study Report (RI/FS)
- Draft Cleanup Action Plan (CAP)
- State Environmental Policy Act (SEPA) Determination of Non-Significance:

Site Location



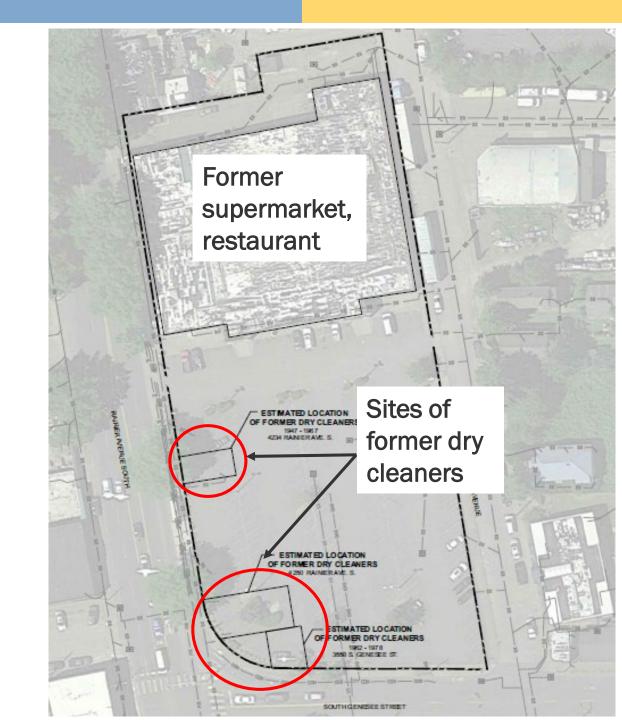


Site History

1930-1968: Three dry cleaners

1967-1998: Supermarket - building supported by creosote timber piles

1999 – 2016: multi-tenant space, including restaurant





- Solvent, and hydrocarbons contamination in soil
 - Solvents in groundwater contamination

 Soil gas vapor detected below screening levels



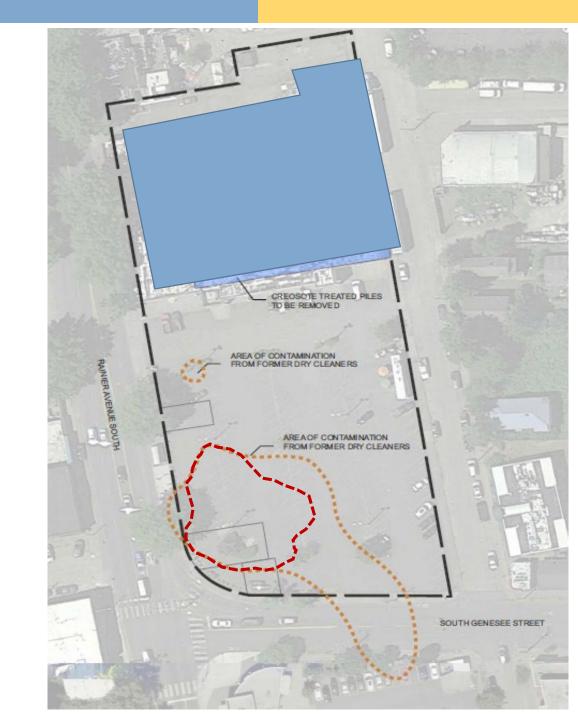




Remedial Investigation Summary

Remedial Investigation Summary

- Soil contamination
- Groundwater contamination
- Possible vapor



Contaminantes of Concern

Soil:

- Perchloroethylene(PCE)
- Trichloroethylene (TCE),
- 2-dichloroethylene (cis-1,2-DCE),
- Trans-1,2-dichloroethylene (trans-1,2-DCE
- Vinyl chloride (VC)
- Carcinogenic PolyAromatic Hydrocarbon (PAH)

Groundwater:

- o PCE
- o TCE
- cis-1,2-DCE
- o trans-1,2-DCE
- VC





Cleanup Action Plan



Selecting a remedy

A feasibility study was conducted

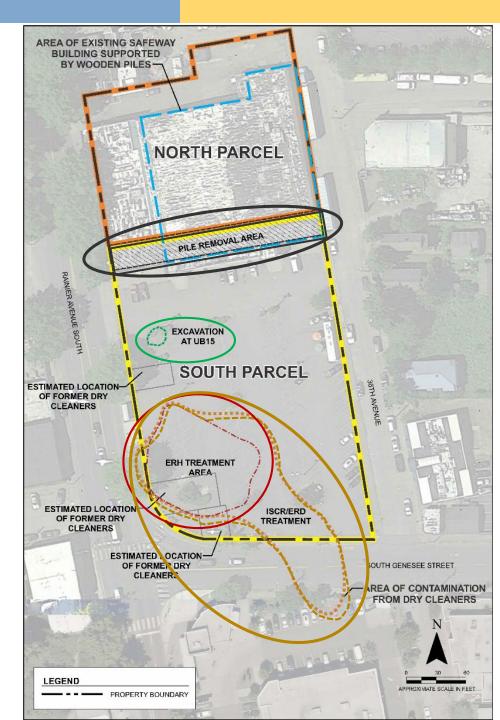
- Cleanup actions were evaluated for the contamination on the site.
- Five alternatives were evaluated on criteria in the MTCA rule

Ecology selected the most protective action possible for the site.



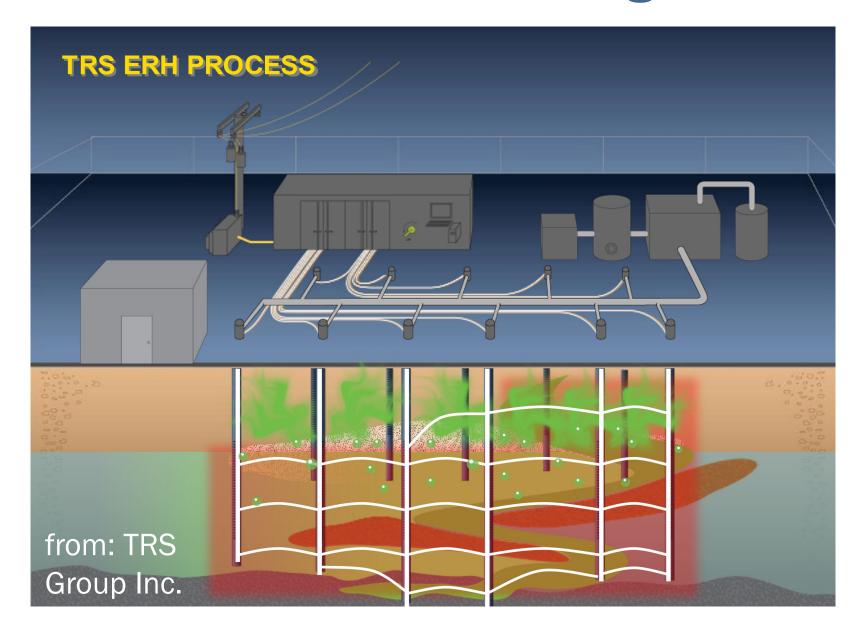


- Targeted excavation and disposal of contaminated soil
- Electrical Resistance Heating/Soil Vapor Extraction (ERH/SVE)
- In-Situ Chemical Reduction/Enhanced Reductive Dechlorination (ISCR/ERD) injections
- Removal of PAH treated piles are not needed for structural support
- Engineering Controls: if necessary after confirmation monitoring



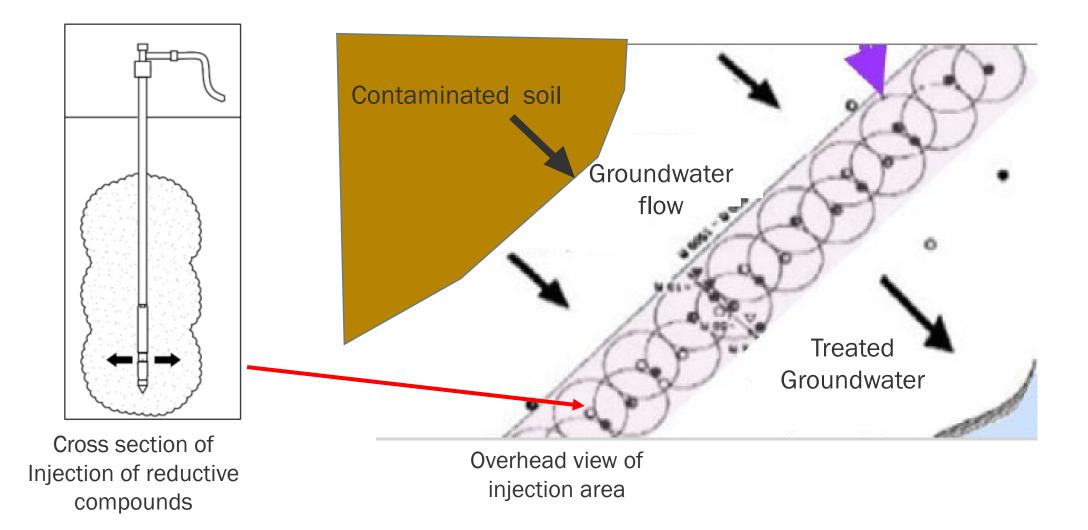
Electrical Resistance Heating Process ECOLOGY State of Washington





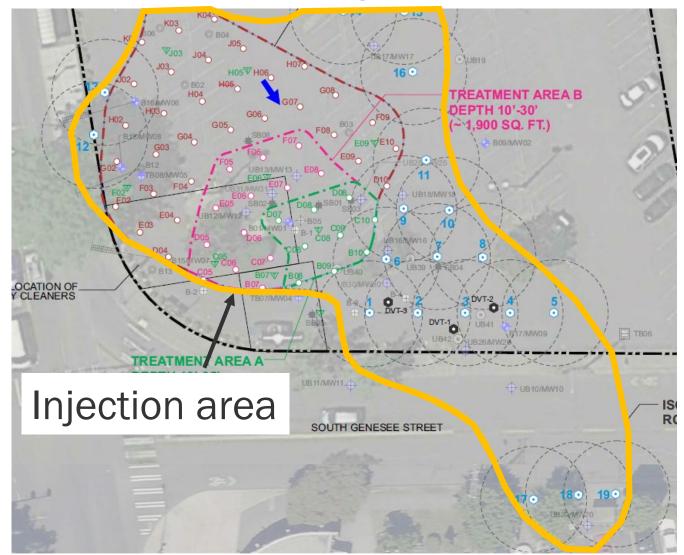
In-Situ Chemical Reduction/Enhanced Reductive Dechlorination Injection





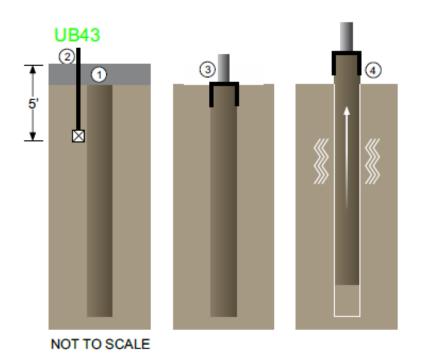
In-Situ Chemical Reduction/Enhanced Reductive Dechlorination Injection





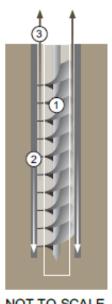
Removal of PAH treated piles not needed for structural support

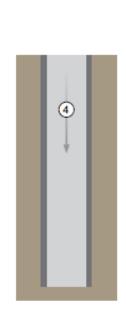


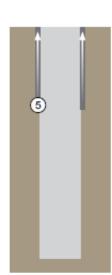


SOIL REMOVAL

- 1 LARGE DIAMETER AUGER
- (2) CAISSON IS ADVANCED AS
- ③ AUGER REMOVES SOIL
- 4 EXCAVATION "HOLE" IS BACKFILLED WITH CDF
- (5) CAISSON REMOVED







NOT TO SCALE



Proposed cleanup timeline

April 2022

Review comments and finalize technical documents

May 2022

Injections for groundwater treatment

ERH electrode and vapor extraction installation

June – August 2022

ERH surface component installation

August 2022-January 2023

ERH operation and vapor recovery

Potential 2nd round of groundwater treatment injections

2023+

Groundwater and vapor evaluation



Comment Period



Documents for comment

- Prospective Purchasers Consent Decree
- Remedial Investigation/Feasibility Study report
- Draft Cleanup Action Plan
- SEPA Checklist and Determination of Non Significance
- Public Participation Plan



How to Comment

March 18 – April 16, 2022





1.) Comment Online

Rainier Mall Cleanup Site:

- http://bit.ly/Ecology-RainierMall-Comments
- http://bit.ly/Ecology-RainierMall



2.) Contact Site Manager

Tanner Bushnell – Site Manager PO Box 330316 Shoreline, WA 98133-9716

Email: tbus461@ecy.wa.gov





Redevelopment Plans

Future use





For more information and to comment:



Rainier and Genesee



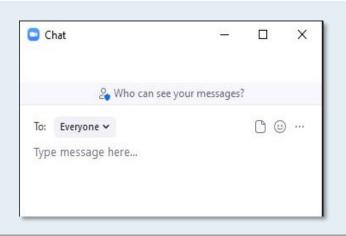


Questions?



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Facilitators will read your typed questions



Ian Fawley





Kelsey Ketcheson



Public Comment Period Information March 18, 2022 – April 16, 2022

Thank you

Tanner Bushnell Site Manager 425-691-0571 Mobile tbus461@ecy.wa.gov