

Port of Vancouver Groundwater Cleanup

Presentation to VLWP
October 21, 2009



THE PORT OF POSSIBILITY

Presentation Objectives

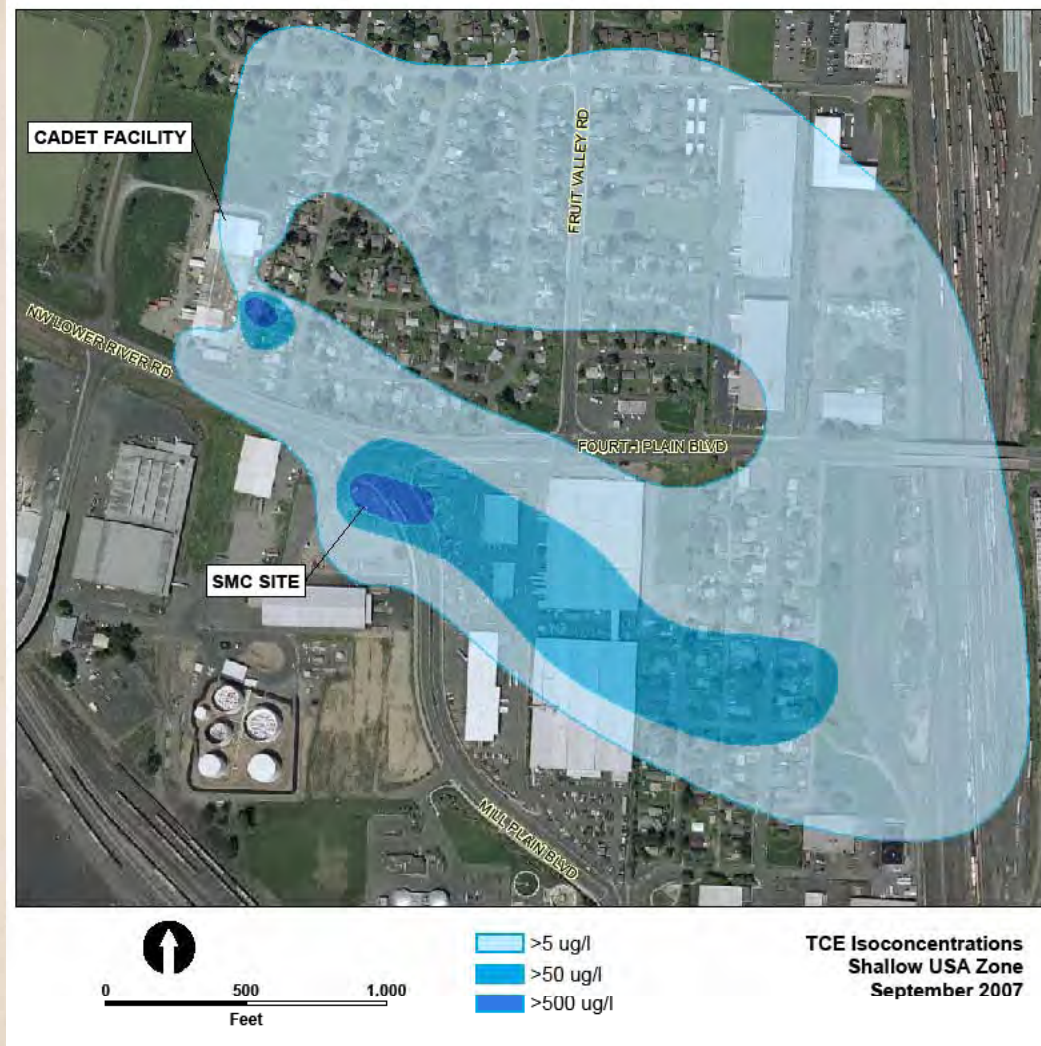
- Background cleanup project
- What is being done?
- Installation of Groundwater Cleanup System



Vicinity Map



Groundwater Shallow Zone



Vancouver Lake Aerial



Vancouver Lake Lowlands

- Lower Columbia Fish Recovery Board Watershed Plan developed in 2006
- Balance water use needs of people and natural resources
- Identified lowlands as future regional water source
- Groundwater contamination impacts



1998 Excavation & Treatment Contaminated Soil



2002-2004 Swan Chemical Injection



THE PORT OF POSSIBILITY

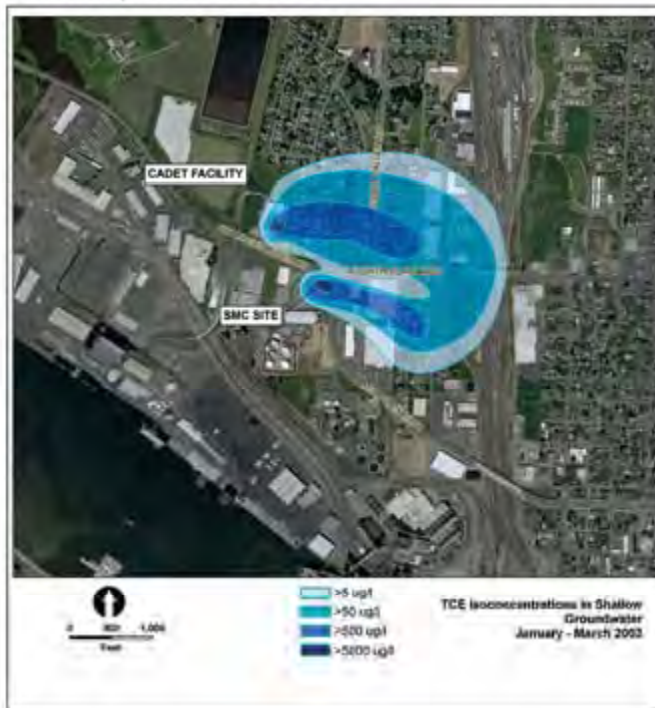
Cadet Site Contaminant Reduction

- 2002- Air sparging system installed
- 2003 - Soil vapor vacuum systems in six FVN homes
- 2004/2005 – Eight recirculating wells (RGRW)

Contaminant Removal/Reduction

Progress in Cleaning Up Groundwater Contamination

January-March 2002



Parametrix

January-March 2009



Port of Vancouver USA 

Groundwater Cleanup Facility

Contractor:
Rotschy Inc. of Yacolt, Wash

- Construction Start:
October 2008
- Construction Complete:
June 2009



Photo taken November 2008

Pump and Treat Alignment



Pumping Well Installation

Contractor:
Rotschy Inc. of Yacolt, Wash.

Contract Completion:
June 2009

- Drill 40-inch boring
- 36-inch extraction well
- Well depth 120 feet below ground surface



Photo taken September 2008

Groundwater Cleanup Facility

Contractor:

Rotschy Inc. of Yacolt, Wash.

Contract Completion: *June 2009*

- Well video tape
- Check well integrity



Photo taken September 2008



THE PORT OF POSSIBILITY

Underground Pipe Installation

Contractor:

Rotschy, Inc. of Yacolt, Wash.

Contract Completion: *June 2009*

- Installation of 24-inch force main pipe across St. Francis Boulevard



Photo taken September 2008



THE PORT OF POSSIBILITY

Underground Pipe Installation

Contractor:
Rotschy Inc. of Yacolt, Wash.

Contract Completion:
June 2009

- Near CPU substation
- Jack and bore 60-inch drill under rail tracks



Photo taken October 2008

Underground Pipe Installation

Contractor:
Rotschy Inc. of Yacolt, Wash.

Contract Completion:
June 2009

- Siphon placement under gas lines
- U-shaped pipe: 24-36 inch



Photo taken September 2008



THE PORT OF POSSIBILITY

Groundwater Cleanup Facility

Contractor:
Rotschy Inc. of Yacolt, WA

Contract Completion:
April 2009

- Tower placement on concrete pad



Photo taken February 2009

Groundwater Cleanup Facility

Contractor:
Rotschy Inc. of Yacolt, WA

Contract Completion:
April 2009

- Media placement
- Final height ~ 80 feet
- 10-foot diameter



Photo taken February 2009



THE PORT OF POSSIBILITY

Groundwater Cleanup System

- System Complete
- Start June 2009
- To date:
 - 276 million gallons treated through system
 - 88 pounds TCE
 - 37 pounds PCE
 - 138 pounds Total VOCs



Questions?

