



1/13/10 Portland Harbor CAG Meeting

State's Role in Cleaning Up the Willamette River: Upland Sites and Source Control

Jim Anderson

DEQ Portland Harbor Section Manager

January 13, 2010

<http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/Index.htm>



Portland Harbor Agencies' Roles

Portland Harbor MOU Signed 2/01

- **Identifies roles & responsibilities of EPA & DEQ**
 - EPA Lead Agency overseeing in-water work
 - DEQ Lead Agency overseeing upland SC
- **Establishes inter-governmental project team**
 - EPA, DEQ, 6 tribal governments, & 3 NRT agencies



DEQ Efforts in PH Source Control

- 17 cleanup sites in PH in 1998
- Currently >50 active cleanup sites in various stages of investigation &/or cleanup
- Goal of source control is to identify, evaluate & control upland sources of contamination threatening the river
- Continue to identify additional sites in area that may be sources of contamination



Objective of PH Source Control

- **Control upland sources posing unacceptable risk to in-water receptors.**
- **Prevent recontamination from uncontrolled upland sources**



Portland Harbor Source Control

Achieving PH Source Control

- **DEQ uses State Removal or Remedial authority to achieve source control**
- **Typically perform source control actions under Removal authority to meet PH ROD schedule**



Contaminant Transport Pathways

- **Overland run-off & bank erosion**
 - Soil to sediment
- **Stormwater**
 - Water & solids to river/sediment
- **Groundwater**
 - Dissolved & free phase to river/sediment



Portland Harbor Source Control

3 types of Source Control Decisions

- 1) Is there a source & complete contaminant pathway to the river?**
- 2) What source control measure is needed to control the source?**
- 3) Has the source control measure adequately controlled the source?**



Joint Source Control Strategy

- Developed jointly by DEQ & EPA & finalized 12/05
- Establishes regulatory & technical framework for controlling on-going upland sources of contamination threatening the river
- <http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm>



Portland Harbor Source Control

Joint Source Control Strategy (JSCS)

- JSCS is a screening-level risk assessment
- Upland contaminant concentrations are compared to Screening Levels Values (SLVs) protective of the river
- Sources exceeding SLVs are further considered for Source Control Actions

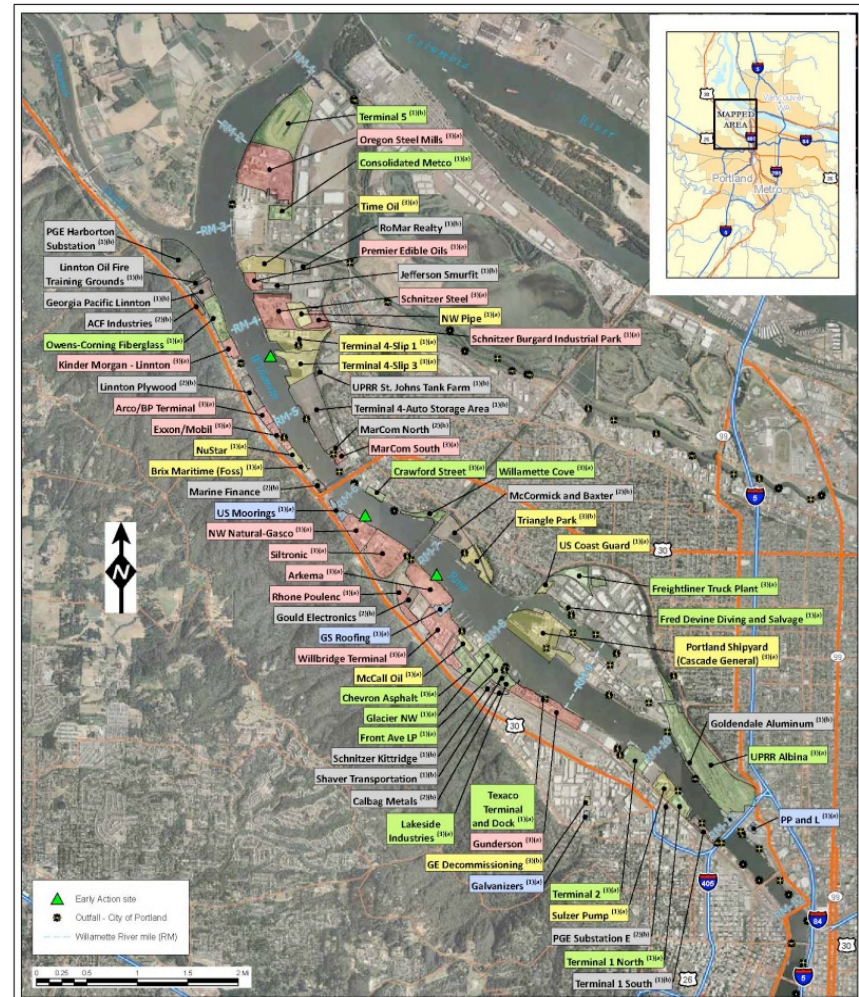


Focus of Source Control

- Implement effective Source Control Measures (SCMs) at all High Priority sites by PH ROD (late-2012)
- Complete Source Control Evaluations (SCEs) at all Medium & Low Priority sites by 1/11
- Stormwater

Portland Harbor Source Control Map

<http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf>



PORTLAND HARBOR CLEANUP SITES

Site source control priority

- High priority site
- Medium priority site
- Low priority site
- Priority to be determined
- Not a current or anticipated future source

FOOTNOTES

SOURCE CONTROL MEASURE (SCM) STATUS

- (1) - None
- (2) - Source control measure in place
- (3) - Interim source control measure in place

SOURCE CONTROL EVALUATION (SCE) STATUS

- (a) - Source control evaluation in progress
- (b) - Source control evaluation complete



State of Oregon
Department of
Environmental
Quality

Base imagery ca. 2005 from Oregon Imagery Explorer web mapping service.
City of Portland outfalls from City of Portland Bureau of Environmental Services.
Tadous from Metro BLS.



Source Control Status

- **16 High Priority Sites**
 - SCE completed or to be completed in 2010 at 14 sites
 - Interim SCMs implemented at 12 sites
- **16 Medium Priority Sites**
 - SCE completed or to be completed in 2010 at 12 sites
 - Interim SCMs implemented at 8 Medium Priority sites
- <http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm>



Source Control Status- High Priority Sites

High Priority Contaminant Transport Pathways

- 1) **Evraz Oregon Steel Mills**
 - Bank erosion
 - Stormwater

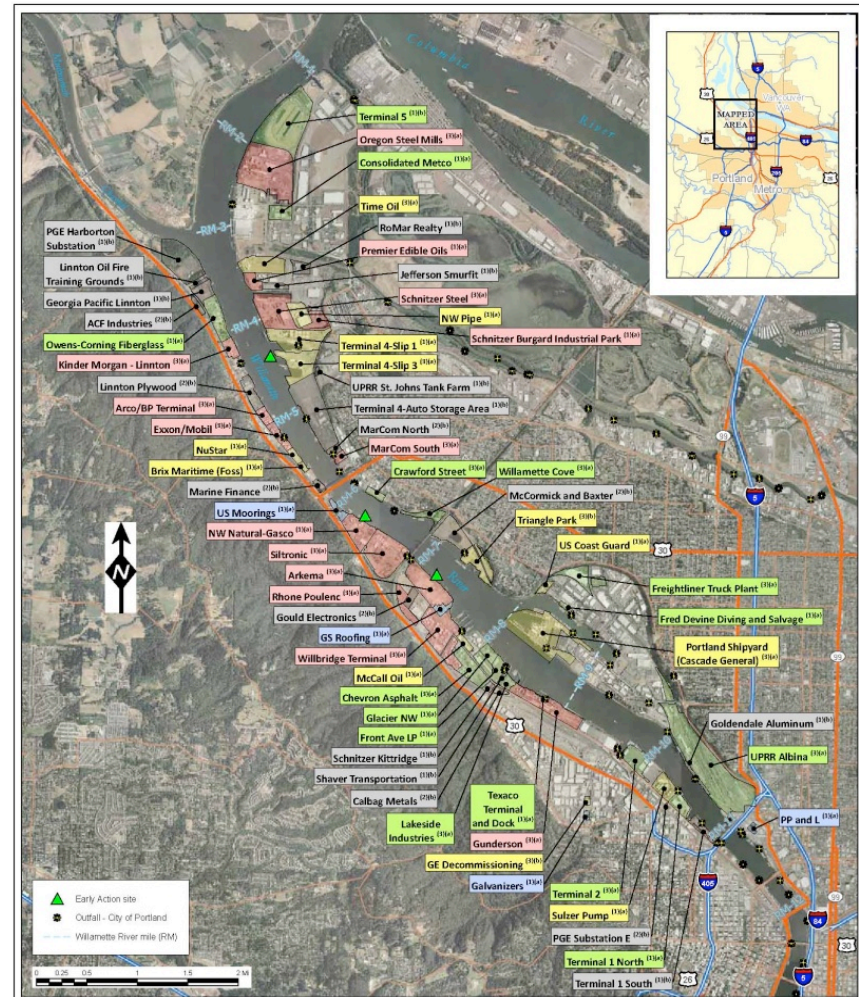
- 2) **City Stormwater Outfalls**
 - Stormwater

- 3) **Premier Edible Oils**
 - Groundwater

- 4) **Burgard Industrial Park**
 - Stormwater

Portland Harbor Source Control Map

<http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf>



PORTLAND HARBOR CLEANUP SITES

Site source control priority

- High priority site
- Medium priority site
- Low priority site
- Priority to be determined
- Not a current or anticipated future source

FOOTNOTES

SOURCE CONTROL MEASURE (SCM) STATUS

- (1) - None
- (2) - Source control measure in place
- (3) - Interim source control measure in place

SOURCE CONTROL EVALUATION (SCE) STATUS

- (a) - Source control evaluation in progress
- (b) - Source control evaluation complete



State of Oregon
Department of
Environmental
Quality

Base imagery ca. 2005 from Oregon Imagery Explorer web mapping service.
City of Portland outfalls from City of Portland Bureau of Environmental Services.
Tadpole from Metro BLS.



Source Control Status- High Priority Sites

High Priority Contaminant Transport Pathways

- 5) **Schnitzer Steel**
-Stormwater
- 6) **Kinder Morgan Linnton**
-Groundwater
- 7) **Arco/BP Terminal**
-Groundwater
- 8) **Exxon/Mobil Terminal**
-Groundwater



Source Control Status- High Priority Sites

High Priority Contaminant Transport Pathways

9) MarCom South

-Overland runoff

10) Gasco

-Groundwater

-Bank erosion

11) Gasco (Siltronic)

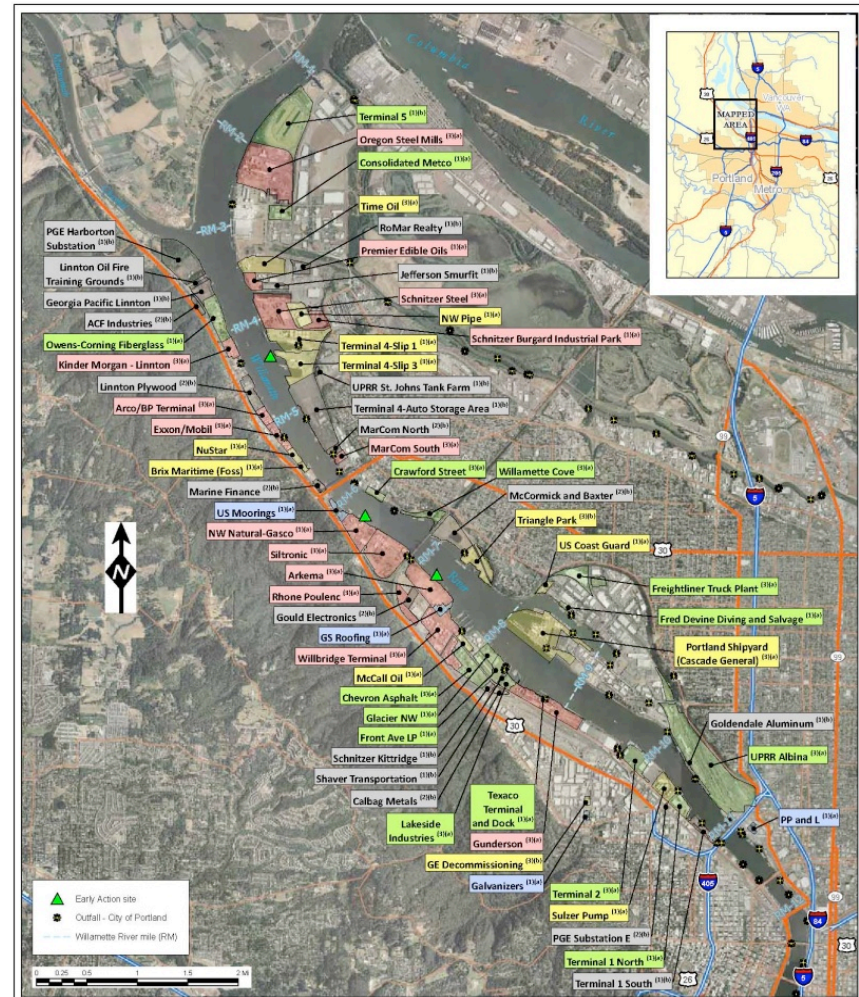
-Groundwater

12) Siltronic

-Groundwater

Portland Harbor Source Control Map

<http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf>



PORTLAND HARBOR CLEANUP SITES

Site source control priority

- High priority site
- Medium priority site
- Low priority site
- Priority to be determined
- Not a current or anticipated future source

FOOTNOTES

SOURCE CONTROL MEASURE (SCM) STATUS

- (1) - None
- (2) - Source control measure in place
- (3) - Interim source control measure in place

SOURCE CONTROL EVALUATION (SCE) STATUS

- (a) - Source control evaluation in progress
- (b) - Source control evaluation complete



State of Oregon
Department of
Environmental
Quality

Base imagery ca. 2005 from Oregon Imagery Explorer web mapping service.
City of Portland outfalls from City of Portland Bureau of Environmental Services.
Tadous from Metro BLS.



Source Control Status- High Priority Sites

High Priority Contaminant Transport Pathways

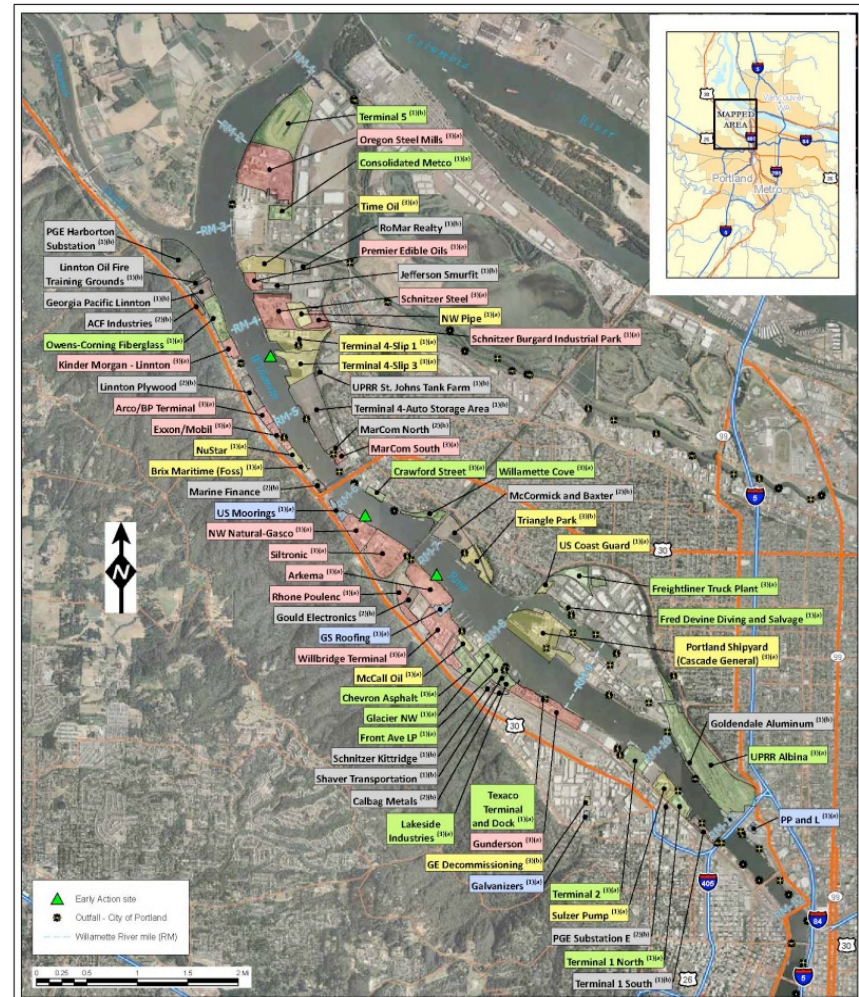
13) Rhone Poulenc
-Groundwater

14) Arkema
-Groundwater
-Bank erosion
-Stormwater

15) Willbridge
-Groundwater

Portland Harbor Source Control Map

<http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf>



PORTLAND HARBOR CLEANUP SITES

Site source control priority

- High priority site
- Medium priority site
- Low priority site
- Priority to be determined
- Not a current or anticipated future source

FOOTNOTES

- SOURCE CONTROL MEASURE (SCM) STATUS**
- (1) - None
 - (2) - Source control measure in place
 - (3) - Interim source control measure in place
- SOURCE CONTROL EVALUATION (SCE) STATUS**
- (a) - Source control evaluation in progress
 - (b) - Source control evaluation complete



State of Oregon
Department of
Environmental
Quality

Base imagery ca. 2005 from Oregon Imagery Explorer web mapping service.
City of Portland outfalls from City of Portland Bureau of Environmental Services.
Tadous from Metro BLS.



Source Control Status- High Priority Sites

High Priority Contaminant Transport Pathways

16) Gunderson

- Groundwater
- Stormwater
- Bank erosion



Source Control Challenges

- Stormwater
- Upriver source control
- Source control triggers & performance standards
- Loading
- DEQ staffing level