Portland Harbor Superfund Site

Air & Waste Management Association
Oregon Chapter

Portland Harbor Technical Luncheon
April 10, 2018

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Oregon Department of Environmental Quality
Oregon’s Contaminated Sites

Active -
- Assigned (420),
  8%
Active -
- Unassigned (2900), 53%
NFA (2130),
  39%
Superfund Sites – Facility Type

- Boat Yards, 21%
- Metals Production, 21%
- Mining, 17%
- Wood Treating, 17%
- Recycling, 8%
- Landfills, 4%
- PDX Harbor, 4%
- Military, 4%
- Pipe Coating, 4%

Legend:
- Active
- NFA
- Superfund
Superfund Sites – Completion Status

Delisted (5), 21%
Deferred (5), 21%
RI/FS (2+), 10%
LTM (7), 29%
RD (4+), 19%

Active
NFA
Superfund
Portland Harbor Superfund Site

Portland Harbor
RM 1.9 to 11.8

Downtown Reach
RM 11.9 to 16.6

Upriver Reach
RM 16.6 to 26.4
Portland Harbor

PCBs (ug/kg)

NPL Listing
Remedial Investigation & Risk Assessments
Feasibility Study
Proposed Plan & ROD
Long-Term Monitoring
Remedial Design Remedial Action
Monitored Natural Recover

NRDA Restoration Plan

Alt B: >1,000 ug/kg
Alt C: >750 - 1,000 ug/kg
Alt D: >500 - 750 ug/kg
Alt E: >200 - 500 ug/kg
Alt F: >75 - 200 ug/kg
Below RALs: 0 - 75 ug/kg
Portland Harbor

Cost – $1 billion
Dredge Volume – 3 million cy
SMA – 370 acres
MNR – 1800 acres
Construction Duration – 13 years
Portland Harbor

Technology Assignments

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<th>CATEGORY NAME</th>
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<td>Acres</td>
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<th>Remedial Action Levels, ug/kg</th>
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<td>PCBs</td>
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<td>12378 PeCDD</td>
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<td>23478 PeCDF</td>
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- Dredge 59%
- Cap 33%
- ENR 8%
Portland Harbor

Technology Decision Tree

RAL Depth > Auth Depth + Buffer + Cap Thickness

Dredge and Cap (See Design Requirements)

Dredge to RAL with Residual Layer (See Design Requirements)
2017 Fire
~ The End ~