

Portland Harbor Superfund Site

April 2008 Update
continued



RI/FS Next steps

- LWG to start writing the RI report
- EPA additional guidance on eco TRVs
- Agree on risk assessment issues by June
- Data “lockdown” – June
- Food Web model update
- PRGs development – fall
- RI and baseline risk assessment report end of 2008



FS transition

- FS Scoping
- Develop refined RAOs and PRGs
- Develop AOPCs
- Refine PRGs – Remediation Goals
- Refine AOPCs to Sediment Management Areas
- Alternatives screening

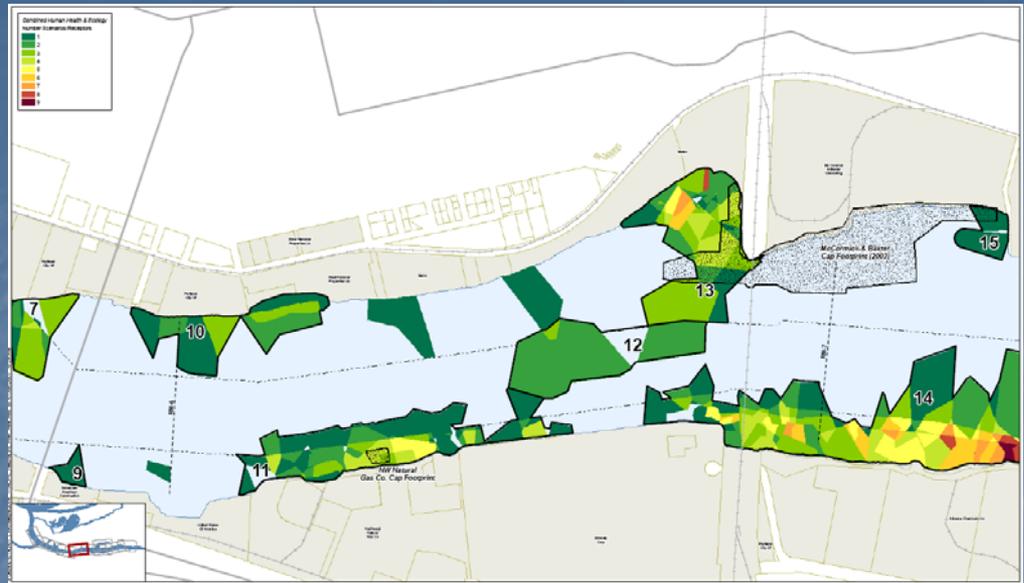
Preliminary Remediation Goals

- “Initial” preliminary remediation goals (iPRGs) were identified in the Round 2 Report
- EPA recently provided comments on developing PRGs and areas of potential concern (AOPCs)
- PRGs should be developed based on the results of the baseline human health and ecological risk assessments, food web models and ARARs
- A number of issues associated with PRG development be worked out - how PRGs will be refined into remedial action goals and performance standards

PRGs and Background

- PRGs for some chemicals and pathways may be below natural and/or anthropogenic background concentrations
- PRGs should be compared to background levels to determine whether it is feasible to achieve risk-based sediment and water cleanup levels in Portland Harbor

AOPCs



- “Initial” areas of potential concern (iAOPCs) were presented in the Round 2 Report to identify data gaps
- AOPCs will be developed based on the results of the baseline human health and ecological risk assessment, PRGs, the application of various modeling results, the spatial distribution of contamination and the application of geo-statistical tools
- Further refined into sediment management areas (SMAs) for evaluation in the Portland Harbor FS

FS Steps

- Screening and optimization steps to initially refine Areas of Potential Concern (AOPC) into Sediment Management Areas (SMA)
- Develop a suite of remedy alternatives that would be carried through the detailed evaluation of alternatives against the National Contingency Plan (NCP) remedy selection criteria.

Sediment Management Areas

- SMAs – combine areas for evaluation
 - Consider physical & chemical parameters, geographic proximity, release mechanism and site specific factors such as current and potential future site use
 - Goal is to identify areas of contamination that may logically be combined for the purpose of developing, screening and evaluating remedial action alternatives across the site

Kicking off the FS

- Ongoing scoping level discussions with LWG
- EPA recently provided "guidance" on FS
- Complexity - size of the Portland Harbor Site, the number of specific sources, the dynamic nature of the river and watershed considerations, the Portland Harbor will be complex
- FS Some streamlining of the FS Report will be necessary to keep it manageable



FS

- Combination remedies - dredging with disposal and placement options, capping and monitored natural recovery will be the primary risk reduction strategy
- Sediment remediation and treatment options and integration into long-term regional sediment management actions may prove cost effective, especially if treatment costs can be off-set by beneficial re-use of treated sediment



Key technical/logistical issues

- Source Control – timing, effectiveness
- Aquatic Habitat Function
- Disposal options - Upland, confined in-water, near shore CDFs, rehandling facilities, beneficial reuse, and pre-treatment
- Sequencing – recontamination, fish windows & flow limitations



FS support documents

- Draft Treatability Study Literature Survey Technical Memorandum
- Side scan sonar FSP
- Mobility testing FSP – TCLP, MET, SBLT

Milestones for 2008

- Round 3B data available May 2008
- Data lockdown June 2008
- Complete model runs (food web model, fate and transport) mid October
- Draft baseline risk assessment
- Draft RI report

2009

- Remedial Action alternatives screening
 - Look at individual SMAs
- Begin detailed analysis of alternatives
 - Alternative groupings (ie, technology emphasis)
- Complete detailed analysis



2001

2002/2003

Summer 2004

Fall 2004

Winter 2005

**AOC
MOU**

**Begin Round 1
Work Plan**

**ROUND 1
SAMPLING:**
•Fish Tissue
•Sediment
•Bathymetry

**Approved Work
Plan and Field
Sampling Plan**

**ROUND 2A
SAMPLING:**
•Surface
•Subsurface
•Bioassays

**Round 1 Site
Characterization
Report**

**ROUND 2A
SAMPLING:**
•Surface Water
•Groundwater pilot

**Step 1 Hydro
Model
Report**

**ROUND 2A
SAMPLING:**
•High Flow
Surface Water

Spring 2007

Round 2 Report

**ROUND 3A
SAMPLING:**
•Sturgeon
•Storm Water

Fall 2006

**Framework
Issues**

**ROUND 3A
SAMPLING:**
•lamprey
•Up & downstream
•Surface Water

Fall 2005

**Food Web
Model Report**

**ROUND 2B
SAMPLING:**
•Benthic (clams)
•Groundwater

Summer 2005

**Round 2A
Data Report**

**ROUND 2B
SAMPLING:**
• Sediment
Cores
•Subyearling
Chinook

Summer/Fall 2007

**F&T Model
Report**

**ROUND 3B
SAMPLING:**
•Biota Tissue
•FS (N&E)
•Risk (bioassay)

2008

**Draft RI and
Baseline
Risk
Assessments**

2009

**Draft FS
Report**

2010

**Proposed
Plan and
Record of
Decision**

Portland Harbor Remedial Investigation and Feasibility Study

EPA Project Team

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Learn more on-line

- DEQ : <http://www.deq.state.or.us/nwr/PortlandHarbor/ph.htm>
- EPA : <http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/PtldHarbor>
- Community Advisory Group: <http://www.portlandharborcag.org/>
- DHS Fish Advisory:
<http://www.dhs.state.or.us/publichealth/fishadv/index.cfm>