Outline

- Site background
- Current site status
- Removal action
- Field work update
- 2012 mussel results
- Upcoming work and schedule
- Community involvement
Cleanup History

• Initial response (1990-1998)
  • 3,300 cubic yards of DDT-contaminated soil removed from upland area
  • Dredged 107,000 cubic yards of contaminated sediment (3 tons DDT) from Lauritzen Channel and Parr Canal
  • Capped upland area with concrete to prevent erosion

• Monitoring and additional investigations
  • Sampling of fish, mussels, sediment, and water
  • Source investigations: embankment sampling, capping a drain pipe, fluid mud study
  • Five Year Reviews in 2001, 2006, and 2011
United Heckathorn Site
Current Site Status

• The upland cap remains intact and protective.
• DDT levels in the Inner Richmond Harbor, Santa Fe Channel and Parr Canal have decreased significantly.
• DDT levels in Lauritzen Channel are elevated and pose a potential long-term risk to human health through consumption of fish.
• DDT levels in Lauritzen Channel pose a potential ecological risk to fish-eating birds and mammals.
Preventing Exposure

- Fenced area around Lauritzen Channel prevents access; active marine terminal subject to homeland security requirements

- State of California recently updated fish advisory; new fish advisory signs posted
Removal Action

• EPA contractors mobilized on October 15, 2012

• EPA is installing a flap-gate on the outfall at the end of the Lauritzen channel to prevent contaminated sediment from re-entering the storm drains

• EPA will clean out sediment that has accumulated in the storm drains adjacent to the outfall. Expected demobilization: November 2012
Update on Field Work

- Report with 2012 passive sampler data expected November 2012
- Mussel data from 2012 sampling
- Contract awarded for next phase of work
Mussel Data - Dieldrin

Dieldrin Concentration (µg/kg ww)

- Richmond Inner Harbor Channel
- Lauritzen Channel/End
- Parr Canal
- Lauritzen Channel/Mouth
- Santa Fe Channel End
# Ongoing 2012-2013 Field Work

<table>
<thead>
<tr>
<th>Task</th>
<th>Field Date</th>
<th>Lab Analysis</th>
<th>Information Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install flap-gate on outfall</td>
<td>Fall 2012</td>
<td>Not applicable</td>
<td>Prevent DDT contaminated sediment in channel from entering outfall</td>
</tr>
<tr>
<td>Bathymetric study</td>
<td>Fall 2012</td>
<td>2 to 3 months</td>
<td>Establish areas of deposition and erosion</td>
</tr>
<tr>
<td>Evaluate other potential DDT sources</td>
<td>Fall 2012 – Winter 2013</td>
<td>2 to 3 months</td>
<td>Establish source(s) to control</td>
</tr>
<tr>
<td>Fish sampling</td>
<td>Winter 2013</td>
<td>2 to 3 months</td>
<td>Evaluate DDT and dieldrin Trends</td>
</tr>
<tr>
<td>Evaluate net flux of sediment in and out of channel</td>
<td>Spring 2013</td>
<td>2 to 3 months</td>
<td>Determine quantity of sediment moving in and out of channel</td>
</tr>
<tr>
<td>Evaluate resuspension of DDT during ship traffic</td>
<td>Spring 2013</td>
<td>1 to 2 months</td>
<td>Determine amount of DDT resuspended and bioavailable</td>
</tr>
<tr>
<td>Sediment sampling</td>
<td>Spring 2013</td>
<td>2 to 3 months</td>
<td>Evaluate DDT and dieldrin Trends</td>
</tr>
</tbody>
</table>
Cleanup Schedule

Present – 2013
Data Collection:
- Identify sources of DDT
- Evaluate sediment transport mechanisms
- Confirm data trends

9/13 – 1/14
Preparation of Feasibility Study

4/14 – 6/14
Prepare Record of Decision Amendment

8/15
Implement Cleanup

2012

6/13 – 10/13
Data Analysis

3/14 – 5/14
Proposed Plan/Public Meeting

Formal Public Comments & Responses

Continued community meetings

*Community meetings throughout process
Community Involvement

EPA held a technical assistance workshop on July 9, 2012

Technical Assistance Needs Assessment (TANA) completed October 2012

EPA will hold a follow-up meeting to discuss the recommendations in the TANA:

December 3, 2012
6 – 8 PM
RichmondBUILD III Facility
500 23rd street
Richmond, CA
Contact Information

Please contact us if you have any questions about the cleanup or community involvement, or would like to be added to the site mailing list:

- Rachelle Thompson (EPA Project Manager)
  415-972-3962; thompson.rachelle@epa.gov
- Jackie Lane (EPA Community Involvement Coordinator)
  415-972-3236; lane.jackie@epa.gov

Information on the United Heckathorn Cleanup:
www.epa.gov/region09/unitedheckathorn