United Heckathorn Site Cleanup
City of Richmond Council Meeting
June 26, 2012

Outline

- Site History and Cleanup
- Current Site Status
- What is the Risk?
- Preventing Exposure
- Cleanup Challenges
- EPA Action Plan
- Completed Work
- Upcoming Work

United Heckathorn Site

Cleanup Actions (1990 to 1998)

1990-1993 – 3,300 cubic yards of DDT-contaminated soil removed from upland area

1996-1997 – Dredged 107,000 cubic yards of contaminated sediment (3 tons DDT) from Lauritzen Channel and Parr Canal

1998 – Capped upland area with concrete to prevent erosion; DDT contaminated soil remains under cap

Overall, cleanup actions were successful in removing a large amount of DDT from the Lauritzen Channel and Parr Canal lessening the impact on the Inner Richmond Harbor.

Monitoring and Additional Investigations

- **1998 -2001** – Collected samples to monitor cleanup
- **2001**– 5-Year Review Report found:
  - Sediment above cleanup levels in Lauritzen Channel
  - Identified areas that could not be dredged (abandoned pilings and areas beneath piers) as potential sources
- **2002 -2008** –Investigation of Sources/Actions
  - Sampled embankments
  - Conducted investigation of storm drain system
  - Found pipe from former facility and capped it
  - Completed Fluid Mud Study
- **2002 – Present** – Continued monitoring (including sediment, mussel, fish and water)

Current Site Status

The upland cap remains intact and protective.

DDT levels in the Inner Richmond Harbor, Santa Fe Canal and Parr Canal have decreased significantly.

Continued monitoring of the Lauritzen has shown that:

- DDT in sediment above cleanup levels
- Mussel tissue shows increasing trends since 2002
- Fish tissue levels elevated

Our focus now is on comprehensively identifying the remaining sources of DDT and addressing them.

What are the Risks?

- DDT levels in Lauritzen Channel are elevated and pose long-term risk to human health through consumption of fish.

- DDT levels in Lauritzen Channel pose ecological risk to fish-eating birds and mammals.

How are people protected from exposure?

Fenced area around Lauritzen Channel prevents access; active marine terminal subject to homeland security requirements (fence, guard, video).

State of California recently updated fish advisory; new fish advisory signs posted.

Cleanup Challenges

Dredging was recommended action at sediment sites in 1990s, but obstructions (piers and pilings) and debris prevented complete removal

National Research Council Report (2007) found dredging only effective at half of 26 Superfund sites evaluated and not recommended as stand alone remedy.

Cleanup Challenges (Continued)

Complicating factors now:

- Multiple potential sources of DDT
- Ship traffic disturbing sediment
- Sediment transport mechanisms not well understood
- Active shipping terminals

National experts state that additional studies for source investigation and sediment transport mechanisms are required.

EPA Action Plan

Engage with City of Richmond and Community to address concerns:

- Quarterly updates at City Council Meetings
- Address action items from EPA Regional Administrator and City of Richmond Mtg. (2/9/12)
- Hold workshop to discuss technical assistance

Install flap gate on Lauritzen Channel Outfall

EPA Action Plan (Continued)

Implement National Expert recommendations to evaluate cleanup options:

- Determine the source of DDT recontaminating sediment
- Evaluate sediment movement within and into Lauritzen Channel (sediment deposition analysis)
- Collect fish, mussel, and sediment to confirm trend of DDT and dieldrin contamination
- Evaluate how DDT in sediment is re-suspended in the water column (fate and transport evaluation)

EPA Regional Administrator and City of Richmond Meeting (February 9, 2012)

Discussed City's concern with the cleanup

EPA agreed to complete several action items including:

- Holding a Community Meeting on the Site Cleanup
- Providing regular updates at City Council Meeting
- Working with local community, to collect and analyze fish samples
- Installing flap gate on Lauritzen Channel
- Facilitating meeting with Natural Resources Damage Trustees

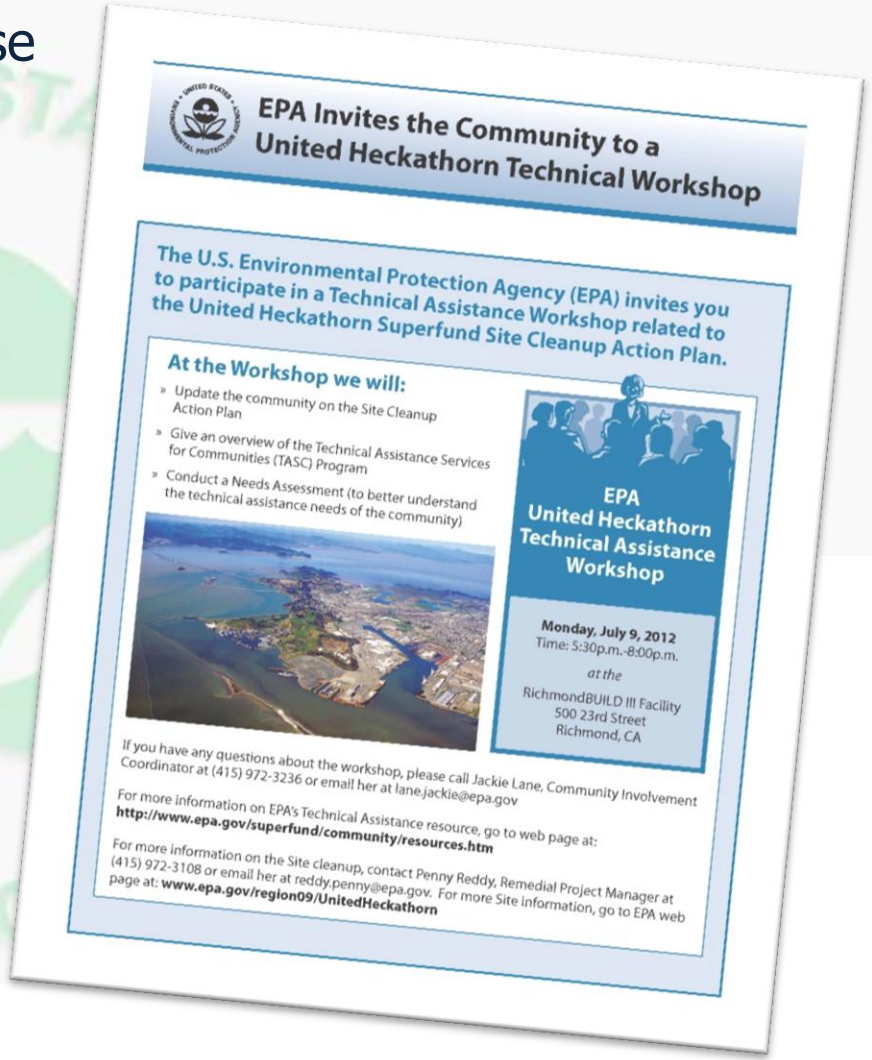
Update on Community Engagement

EPA hosted a community open house on March 19, 2012

EPA will host a technical assistance workshop

- Update on Cleanup Plan
- Overview Technical Assistance Services Communities Program
- Conduct a Needs Assessment (to better understand the technical assistance needs of the community)

July 9, 2012
Time: 5:30p.m.-8:00p.m.
RichmondBUILD III Facility
500 23rd Street
Richmond, CA


EPA Invites the Community to a United Heckathorn Technical Workshop

The U.S. Environmental Protection Agency (EPA) invites you to participate in a Technical Assistance Workshop related to the United Heckathorn Superfund Site Cleanup Action Plan.

At the Workshop we will:

- Update the community on the Site Cleanup Action Plan
- Give an overview of the Technical Assistance Services for Communities (TASC) Program
- Conduct a Needs Assessment (to better understand the technical assistance needs of the community)

EPA United Heckathorn Technical Assistance Workshop

Monday, July 9, 2012
Time: 5:30p.m.-8:00p.m.
at the
RichmondBUILD III Facility
500 23rd Street
Richmond, CA

If you have any questions about the workshop, please call Jackie Lane, Community Involvement Coordinator at (415) 972-3236 or email her at lane.jackie@epa.gov

For more information on EPA's Technical Assistance resource, go to web page at: **http://www.epa.gov/superfund/community/resources.htm**

For more information on the Site cleanup, contact Penny Reddy, Remedial Project Manager at (415) 972-3108 or email her at reddy.penny@epa.gov. For more Site information, go to EPA web page at: **www.epa.gov/region09/UnitedHeckathorn**

Update on Emergency Response Actions

EPA, in partnership with City, plans to install flap gate on the Lauritzen Channel Outfall (July 2012)

Brainstormed additional potential interim response actions for the Site with state regulatory agencies and City (April 2012)

Currently evaluating those additional potential actions

Update on Field Work

- EPA deployed and collected passive samplers (Feb/March 2012) – analyses due: July 2012
- EPA collected mussel samples (March 2012)
- Fish advisory signs posted (April/May 2012)
- Preparing work plans for investigation of DDT sources and bathymetric study (Summer 2012)

Additional Upcoming Work

- EPA facilitating meeting between Natural Resources Damage Trustees and City of Richmond (June 22, 2012)
- EPA to submit other potential interim response options to stakeholders for review
- EPA negotiating work plan to conduct field work

Ongoing 2012-2013 Field Work

Task	Field Date	Lab Analysis	Information Collected
Passive Sampler Study	February - March 2012	Summer 2012	Identify source of DDT; Determine amount of DDT bioavailable
Mussel Sampling	March 2012/Yearly	July 2012	Evaluate DDT and dieldrin trends
Bathymetric Study	Summer 2012	2 to 3 months	Establish areas of deposition and erosion
Evaluate other potential DDT sources	Summer 2012	2 to 3 months	Establish source(s) to control
Install Flap Gate on Outfall	Summer 2012	Not applicable	Prevent DDT contaminated sediment in channel from entering outfall

2012-2013 Field Work (Continued)

Task	Field Date	Lab Analysis	Information Collected
Evaluate net flux of sediment in and out of channel over a tidal cycle	Fall 2012	2 to 3 months	Determine quantity of sediment moving in and out of channel
Fish Sampling	Fall 2012	2 to 3 months	Evaluate DDT and Dieldrin trends
Evaluate resuspension of DDT during ship traffic	Winter 2013	1-2 months	Determine amount of DDT resupsended and bioavailable.
Sediment Sampling	Winter 2013	2 to 3 months	Evaluate DDT and Dieldrin Trends

United Heckathorn Superfund Site Cleanup Schedule

Present – 2013

Data Collection:

- Identify source of DDT
- Evaluate sediment transport mechanisms
- Confirm data trends

6/13 – 8/13

Preparation of Feasibility Study

4/14 – 4/15

Negotiations with Responsible Parties

3/13 – 6/13

Data Analysis

9/13 – 11/13

Proposed Plan/ Public Meeting

1/14 – 3/14

Prepare Record of Decision Amendment

5/15

Implement Cleanup

Contact Information

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

- Penny Reddy (EPA Project Manager)
  415-972-3108; reddy.penny@epa.gov
- Jackie Lane (EPA Community Involvement Coordinator)
  415-972-3236; lane.jackie@epa.gov

Information on United Heckathorn Cleanup at URL
www.epa.gov/region09/unitedheckathorn

Questions