UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, California

United Heckathorn Superfund Site- September 2013 Status Update

Site Background

- The site is located in Richmond Harbor, an inlet of San Francisco Bay, in Contra Costa County, CA (see Figure 1)
- From 1947 to1966, several companies used the site to formulate and ship pesticides.
- The site was listed on the Superfund National Priorities List in March 1990.
- EPA's initial response (1990-1998) included:
    - Removing 3,300 cubic yards of DDT-contaminated soil from the upland area
    - Dredging 107,000 cubic yards of contaminated sediment (3 tons DDT) from the Lauritzen Channel and Parr Canal
    - Capping the upland area with concrete to prevent erosion
- EPA conducted Five Year Reviews in 2001, 2006, and 2011:
    - The upland cap remains intact and protective
    - Ongoing fish, mussel, sediment and water monitoring indicate that DDT levels in Lauritzen Channel pose potential human health and ecological risks

Removal Action

- EPA's removal program spent approximately $190K to install a flapgate over the storm drain outfall in October 2012.
- The flapgate is similar to a one-way valve, and prevents contaminated sediment in the Lauritzen Channel from entering the storm drain system at high tide, while allowing storm flows to exit the storm drain.
- Chad Davisson (City of Richmond) reported that the flapgate appears to be achieving its intended purpose based on the City's water level monitoring.
- EPA also planned to clean out the contaminated sediment that had accumulated in the storm drain system before the flapgate was installed. However, the work is estimated to cost $600K, and that level of funding is not currently available.
- Instead, EPA plans to include the cleanout of the storm drains as part of the future remedy at the site. The sediments in the storm drain were sampled in 2012, and had concentrations up to about 5,000 µg/kg of DDT. In comparison, the median DDT concentration in the channel as of the 2011 Five Year Review was approximately 27,000 µg/kg, with hot spots exceeding 100,000 µg/kg. Therefore, there is low risk that delaying this action would make the contamination at the site worse.

Feasibility Study

- A Tier 1 sediment study was completed in April 2013, which was an initial evaluation of hydrodynamics and sediment movement in the channel. This included a bathymetric survey of the channel to estimate areas of sediment erosion and deposition, and a calculation of the residence time of water in the channel.

- A more detailed analysis of sediment dynamics in the channel, called a Tier 2 sediment study, is in progress. The field work was completed in summer 2013, and included current monitoring, sediment erosion testing, tidal measurements, and particle tracking.
- A source identification study to evaluate any remaining sources of DDT is also in progress. The field work was completed in spring and summer 2013 and included groundwater sampling, sediment sampling, and embankment sampling.
- EPA and its contractors were at the site the week of September 9, 2013, to collect water samples and deploy mussels and polyethylene passive samplers to monitor pesticide levels in and around the Lauritzen Channel. EPA will collect the samplers for analysis the week of October 7.
- EPA's Technical Assistance Services for Communities Program prepared a DDT fact sheet and a fish advisory report in response to community questions raised during the December 2012 Technical Assistance Needs Assessment (TANA). The fact sheet will be distributed to EPA's mailing list and email list for the site. EPA also plans to collect additional fish samples in and around the site in 2013, and is working through the associated contracting logistics.

Project Schedule (see Figure 2)

- Feasibility Study: evaluate possible cleanup options, May 2014
- Proposed Plan: propose a cleanup plan for public comment, August 2014
- Record of Decision: select and formalize a cleanup plan, January 2015
- Negotiations: negotiate with potentially responsible parties to conduct the cleanup, January 2015-December 2015
- Cleanup: begin design and implementation of the cleanup plan, January 2016

EPA Contact Information

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- Additional information on the United Heckathorn cleanup:
  www.epa.gov/region09/unitedheckathorn

LEGEND

- Former United Heckathorn Buildings
- Railroad
- Former Pier Pilings
- Pier Pilings

N

0 187.5 375 750 Feet

FIGURE 1
SITE LOCATION MAP

UNITED HECKATHORN SUPERFUND SITE
RICHMOND, CALIFORNIA

CH2MHILL

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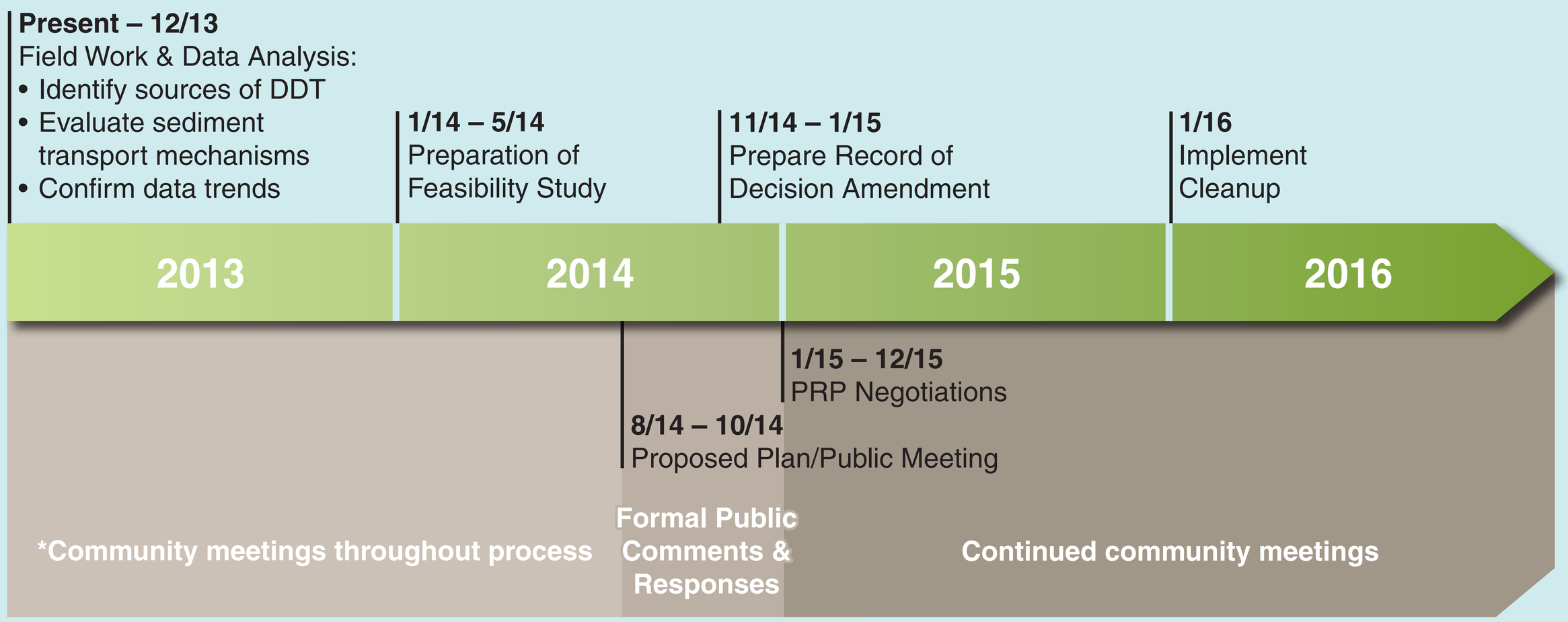
United Heckathorn Superfund Site Cleanup Schedule



2013 Field Work

Task	Status	Information Collected
Install flap-gate on outfall	Complete	Prevent DDT contaminated sediment in channel from entering outfall
Bathymetric study	Complete	Establish areas of deposition and erosion
Sediment sampling	Complete	Evaluate current extent of contamination
Evaluate other potential DDT sources	Field work complete; Data analysis in progress Fall 2013	Establish source(s) to control
Fish sampling event	Fall 2013	Evaluate DDT in fish in Richmond Harbor
Evaluate net flux of sediment in and out of channel	Field work complete; Data analysis in progress Fall 2013	Determine quantity of sediment moving in and out of channel
Evaluate resuspension of DDT during ship traffic	Field work complete; Data analysis in progress Fall 2013	Determine amount of DDT resuspended and bioavailable
Regular monitoring	Field work September – October 2013	Evaluate DDT and dieldrin trends