United Heckathorn Superfund Site

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • December 2006

Richmond, California

FIVE-YEAR REVIEW COMPLETE

The U.S. Environmental Protection Agency (U.S. EPA) completed the second Five-Year Review (FYR) for the United Heckathorn Superfund Site (Site) in Richmond, California. The purpose of a FYR is to determine whether the remedy at the Site is protective of human health and the environment and is functioning as designed. This fact sheet provides a brief summary of the 2006 review results and next steps. The completed FYR report is available at the Site's information repositories and on the U.S. EPA web page (see page 3 for more information).

The cleanup of the upland portion of the Site consisted of removal of pesticide-contaminated soils followed by capping the property. The cleanup of the marine portion consisted of dredging contaminated sediments from Lauritzen Channel and Parr Canal in Richmond Harbor, followed by more than five years of post-remediation monitoring (see Site map). The main contaminants of concern are DDT and dieldrin.

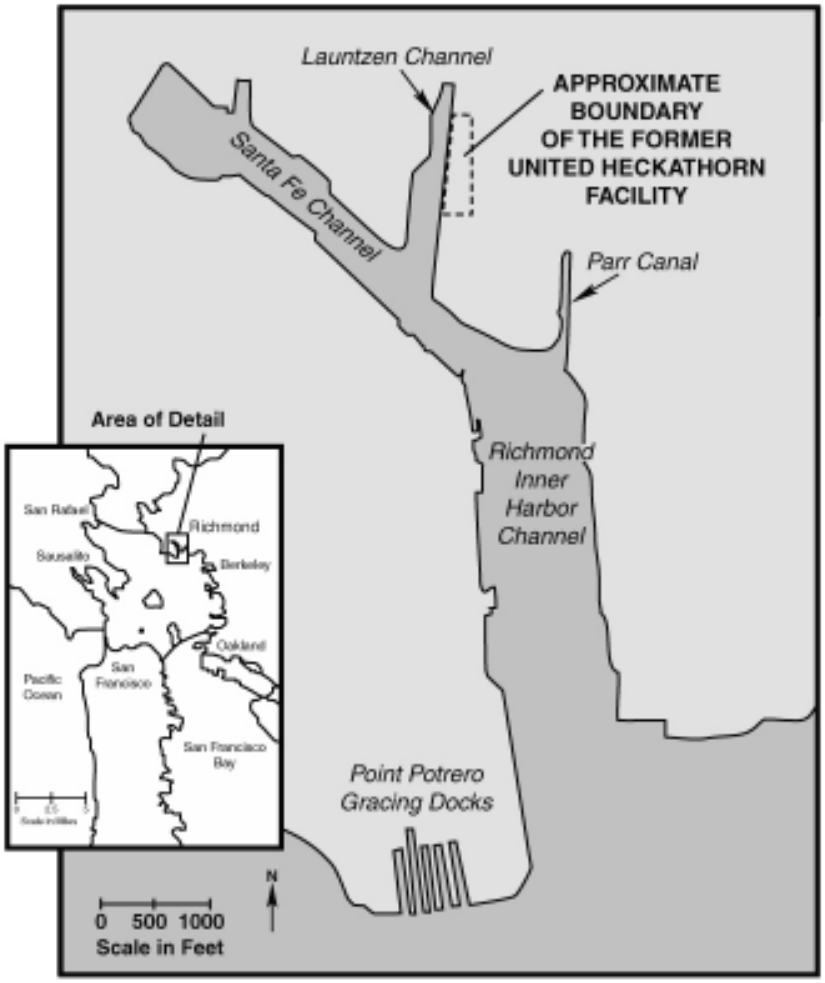


Figure 1: *Location of United Heckathorn Superfund Site*

FISH ADVISORY

In 1994, the California Department of Health Services issued an advisory against consuming any resident bottom-feeding fish, such as White Croaker, from the Richmond Harbor. Fish in the harbor are exposed to multiple contaminants including polychlorinated biphenyls (PCBs). Signs prohibiting fishing are posted in the vicinity of Parr Canal and Lauritzen Channel. Please take these signs seriously!

Conclusion of Review

The remedy implemented at the upland area of the Site is protective of human health and the environment. Routine inspections and monitoring will continue to assure the protectiveness of the remedy at the upland area.

The remediation goals for the marine area have not been maintained since the remedy was implemented. The first Five-Year Review

Report (2001) concluded that the concentrations of DDT and dieldrin in the water and sediment did not meet cleanup goals based on four years of post-remediation monitoring. It recommended studies to determine the sources of the residual contamination. These source studies, as well as additional investigations, have been completed and the results are being used to prepare a focused feasibility study (FFS). The FFS will evaluate alternatives for addressing the remaining contamination at the Site.

U.S. EPA has recommended that certain actions be taken to ensure that the remedies for the marine area are protective in the future. These are discussed below.

2006 Marine Area

Issue

The remedy implemented at the marine area of the Site is not yet protective of human health and the environment because cleanup goals for DDT and dieldrin for water and marine sediments have not been maintained. As a result, these contaminants may accumulate in the tissues of edible marine organisms (e.g., fish, mussels), posing a potential risk to fish-eating birds, mammals, and fishermen and their families. Even though multilingual signs are posted that warn of the risks of consuming fish or shellfish, it is likely that some consumption of contaminated fish may still occur when warning and no-trespassing signs are ignored or misunderstood. Access to the Site by trespassing boats cannot be completely eliminated. In addition, contaminated biota (e.g., fish) cannot be prevented from migrating to areas outside of the Site where they might be harvested and consumed by fishermen, birds, or wildlife.

Recommendation

U.S. EPA is currently preparing a FFS to assess a range of alternatives for addressing the remaining contamination at the Site. It is important to fully analyze all cleanup options before making a cleanup decision. Some additional investigation may occur during the preparation of the FFS so that the feasibility of proposed alternatives can be better evaluated.

The FFS will evaluate proposed alternatives against U.S. EPA's nine criteria (see page 3). Alternatives that meet these criteria, including the U.S. EPA's preferred alternative, will be made available for public comment.

Next Steps

Once the FFS is completed, the U.S. EPA will develop a proposed plan and open a 30-day public comment period. During this time, the U.S. EPA will take written comments by fax, email or mail within the 30-day public comment period. The U.S. EPA will also conduct a public meeting to present the plan and formally record verbal comments.

Site History

The United Heckathorn Superfund Site is located in Richmond Harbor in Contra Costa County California (See Figure 1). The Site is an industrial area dominated by petroleum and shipping terminals. From 1947 to 1956, several operators, who are collectively called United Heckathorn, used the Site to formulate and package pesticides. No chemicals were manufactured on the Site. United Heckathorn would receive technical grade pesticides from chemical manufacturers, grind them in air mills, mix them with other ingredients such as clays or solvents, and package them for final use in liquid or powder formulations. Although many pesticides were handled at the Site, DDT accounted for 95% of its operations.

United Heckathorn went bankrupt and vacated the Site in 1966. Between 1966 and 1970 the United Heckathorn buildings were demolished and cleared from the Site. In the 1970s, the Site was used primarily for bulk storage. In 1981, the Levin Metals Corporation purchased the property to operate a bulk shipping facility at the Site.

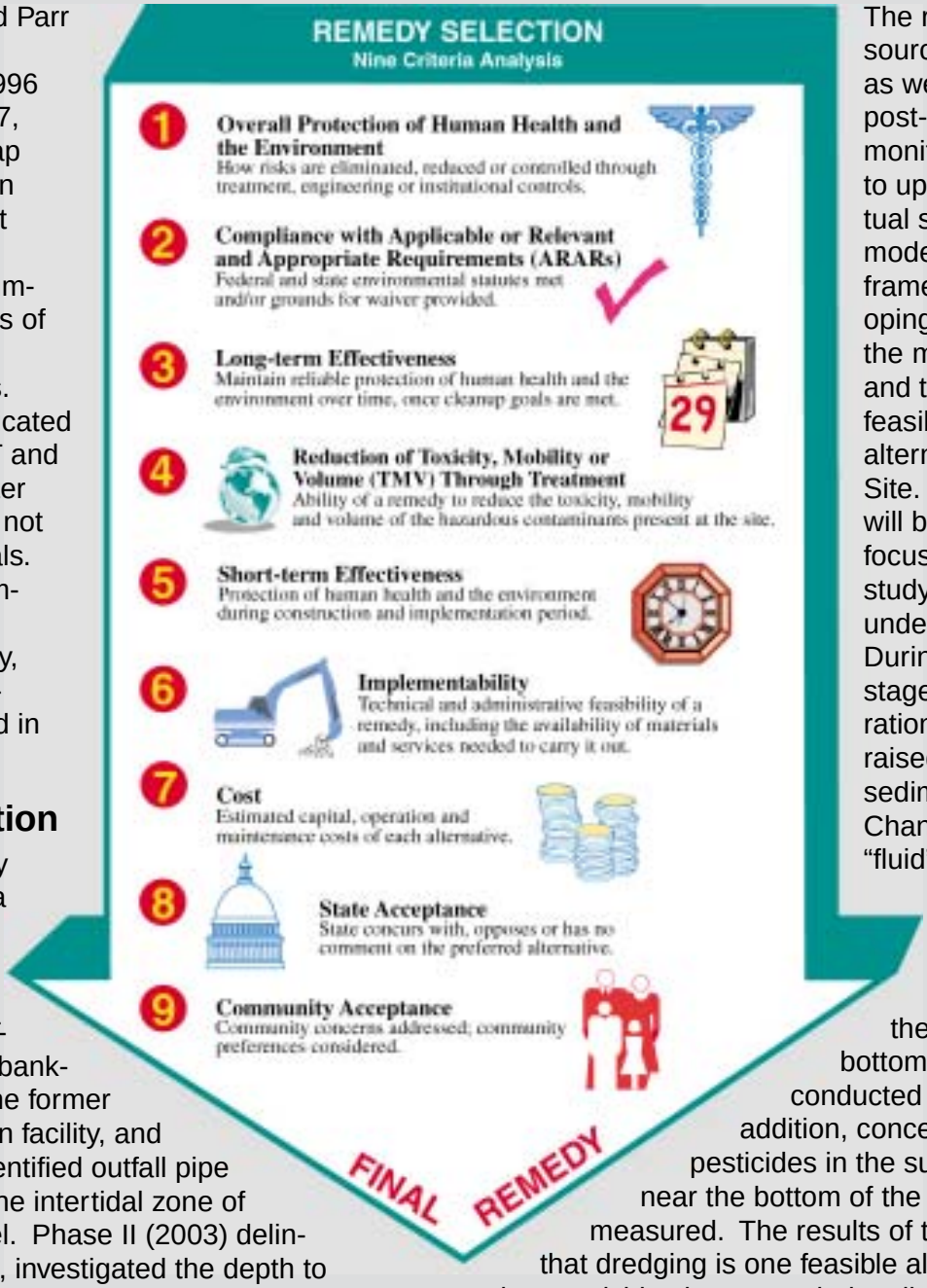
In 1980, the United Heckathorn Site was inspected and sampled by the California Department of Health Services. Chlorinated pesticides and metals were detected in soil samples, and the area was designated a State Superfund Site in March 1982. In March 1990, U.S. EPA placed the Site on the National Priorities List and in August of that year assumed lead agency status.

Interim response actions were conducted from 1982 to 1993 in the upland and embankment areas of the United Heckathorn Site, which removed approximately 99% of the DDT from these areas. A 1995 Record of Decision (ROD) specified a remedy for contaminated marine sediments, which included dredging the sediments, adding clean sand to improve habitat, capping the upland area, recording a deed restriction, and monitoring the marine area for at least five years.

The Lauritzen and Parr Channels were dredged in late 1996 through April 1997, and the upland cap was constructed in 1998-99. The first Five-Year Review Report (2001) summarized four years of post-remediation monitoring results. These results indicated that levels of DDT and dieldrin in the water and sediment did not meet cleanup goals. The Report recommended a source identification study, which was subsequently conducted in two phases.

New Information

The Phase I study (2002) identified a hotspot of DDT-contaminated sediment beneath a pier, DDT-contaminated embankment soils near the former United Heckathorn facility, and a previously unidentified outfall pipe discharging into the intertidal zone of Lauritzen Channel. Phase II (2003) delineated the hotspot, investigated the depth to which bank soils were contaminated, and plugged the outfall discharge.



The results of these source investigations, as well as further post-remediation monitoring, were used to update the conceptual site model. This model forms the framework for developing an evaluation of the most cost-effective and technologically feasible remedial alternatives for the Site. This evaluation will be presented in a focused feasibility study (FFS), currently under preparation. During the initial stages of FFS preparation, a concern was raised that the bottom sediments of the Channel might be too "fluid" to dredge effectively. To address this concern, a field investigation of the density of bottom sediments was conducted in 2004. In addition, concentrations of pesticides in the suspended layer near the bottom of the Channel were measured. The results of this study indicate that dredging is one feasible alternative, and that pesticides in suspended sediments may be contributing to exceedances of the cleanup goals in the water column.

Site Information Repository

The following locations have the Site cleanup documents available for public review or the United Heckathorn Superfund Sites:

Richmond Public Library
325 Civic Center
Richmond, CA 94804
(510) 620-6561

Superfund Records Center
95 Hawthorne Street
San Francisco, CA 94105
(415) 536-2000

U.S. EPA Completes Five-Year Review for the United Heckathorn Superfund Site

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U.S. EPA Web Page

For more Site information, go to the U.S. EPA Web Page at
http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/vWSOAlphabetic?openview

Go down the page and click “Site Overviews.”

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