Alark Hard Chrome Superfund Site

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY • REGION IX • SEPTEMBER 2001

Alark Hard Chrome Added to Superfund List

This is the first in a series of fact sheets from the U.S. Environmental Protection Agency (EPA) which provides information on the Alark Hard Chrome Superfund Site in Riverside, California. The site was added to EPA's National Priorities List (NPL), commonly called the Superfund List, in November 2000. This allows EPA to use federal resources to conduct cleanup activities at the site.

Included in this fact sheet are a short history of the site, information about future activity, and information on how you can become involved in the Superfund process.

Site History

Alark Hard Chrome was a metal plating shop in Riverside, CA, that operated from 1971 until it was closed in 1985. Soil and groundwater were contaminated with chromium as a result of spills, drips and discharges of plating solutions to a sump on the premises.

In 1982, the Riverside County Health Department inspected the site and discovered soil contamination. The Alark Responsible Parties were ordered to investigate the full extent of contamination at the site. All plating equipment and indoor storage tanks were removed from the site when the Riverside County District Attorney's Officer permanently closed Alark's operations in November 1985.

During the 1980s, the Alark Responsible Parties conducted investigations and in 1986 performed an unauthorized excavation action which was halted by the California Department of Toxic Substances Control (DTSC), a part of the California Environmental Protection Agency.

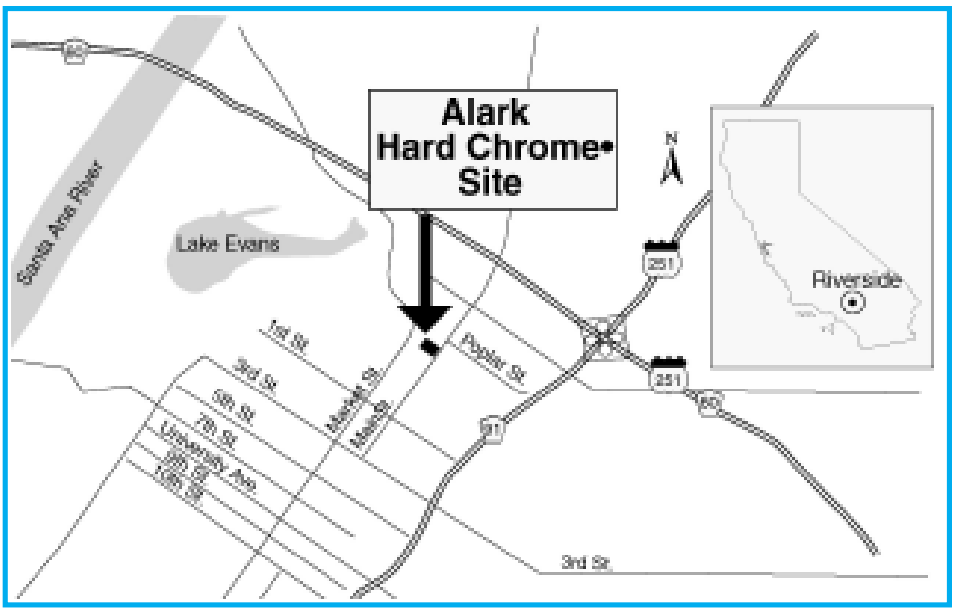

Figure 1: Location of Alark Hard Chrome Superfund Site

In 1990, DTSC took over the site investigation, splitting their efforts into a soils component and a groundwater component. In 1994, DTSC excavated approximately 1,200 cubic yards of the most heavily contaminated soils from the middle of the former Alark facility (see Figure 2, page 2). This area was

also the main source of groundwater contamination. Once the excavation was completed, the site was closed off and cleanup work stopped.

Between 1991 and 1995, the State of California installed ten groundwater monitoring wells in the vicinity of the Alark Hard Chrome site to monitor groundwater contaminated by chromium from releases at the site. In November 2000, Alark Hard Chrome was added to the federal Superfund List. During April 2001, EPA sampled the ten wells and analyzed them for metals, including total chromium and hexavalent chromium.

A comparison of EPA's April 2001 and the State's 1995 groundwater sampling results revealed that the chromium concentrations in groundwater are generally consistent with results from the last sampling event in December 1995, with one exception. The level in one well, MW-9, decreased substantially between December 1995 and April 2001. In December 1995, MW-9 contained 5,900 micrograms per liter (ug/L) for hexavalent chromium, but by April 2001, the concentration had decreased to less than 1 ug/L. A microgram is one-millionth of a gram.

What is Chromium?

Chromium occurs naturally in the environment as chromium (III), the trivalent form, and less commonly as chromium (VI), the hexavalent form. Chromium III is an essential nutrient in our diet. Exposure to chromium happens mostly from breathing it in workplace air or ingesting it in water or food. Chromium VI is used in a number of industrial processes, including electroplating. Chromium VI compounds are considered carcinogenic (cancer causing) when inhaled into the lungs based on increased incidences of lung cancer in industrial workers and on animal studies. Whether or not chromium VI compounds can cause cancer when ingested with food or water is still the subject of scientific debate. Thus far no evidence has been found to demonstrate that chromium VI is carcinogenic when ingested but studies are currently underway to provide more data to evaluate this question.

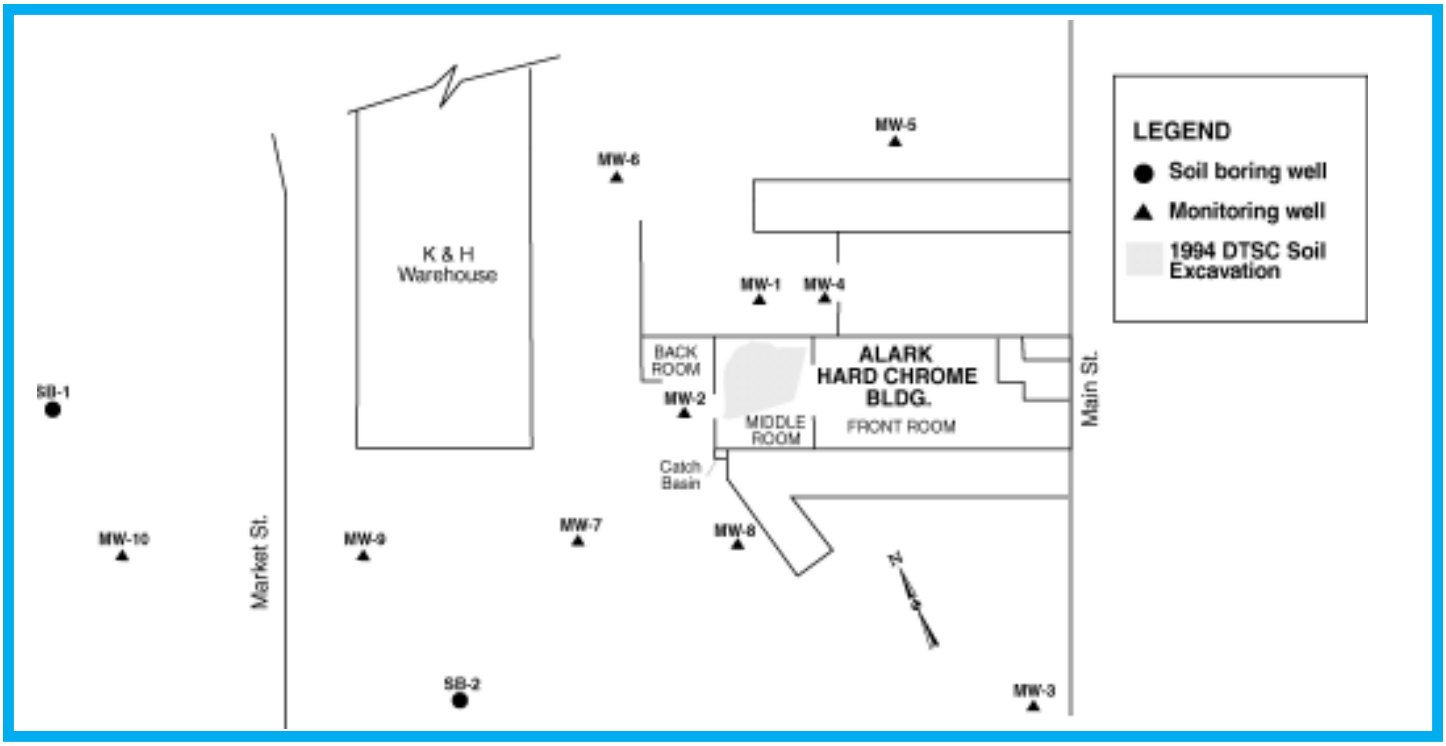

Figure 2: Location of monitoring wells, soil boring wells and excavation at Alark Hard Chrome

Well MW-7, which has produced groundwater that has consistently contained the highest concentrations of chromium at the site, produced a groundwater sample in April 2001 that contained 17,300 ug/L hexavalent chromium. In April 2001, five of the ten wells at the site exceeded the State of California's Maximum Contaminant Level (MCL) for chromium, which is 50 ug/L. The five wells exceeding the MCL were: MW-1, MW-2, MW-4, MW-7, and MW-8.

In April 2001 EPA also collected a groundwater sample from MORI-1, an irrigation well that supplies non-potable water to a lagoon in Fairmount Park near the site. This sample contained less than one ug/L hexavalent chromium.

Future Activity

EPA plans two important activities during the coming months.

Combining EPA's recently collected data with the DTSC data from past site investigations, EPA will develop a Remedial Investigation (RI) work plan. By analyzing existing data, EPA will be able to focus the RI on areas where the extent of contamination is not fully defined. The RI is scheduled for completion in 2003.

EPA will also conduct community interviews as it develops its Community Involvement Plan. Further community activities will be scheduled as events unfold at the site.

Community Involvement Process

EPA policy and the Superfund law establish a strong program of public participation in the site cleanup process. The purpose of the Community Involvement program is to help community members become in-

What is Superfund?

Superfund is the commonly used name for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a federal law enacted in 1980 and amended in 1986. CERCLA enables EPA to respond to hazardous waste sites that threaten public health and the environment. EPA responds to a hazardous waste site by identifying those who are responsible for contaminating it, then requiring them to perform cleanup activities.

If EPA is unsuccessful in identifying responsible parties, EPA may use Superfund resources to perform the cleanup. These funds were largely generated from past taxes on petroleum and chemical industries, and an environmental tax placed on corporations. EPA's taxing authority expired in 1995.

Sites that score high enough on the Superfund Hazard Ranking System (HRS) are listed on the National Priorities List (NPL) of contaminated sites and are eligible for long-term cleanup under Superfund. Currently, there are about 1,200 sites nationwide listed on the NPL.

The Superfund process has several steps. As indicated on page 4, the process begins with the discovery of the site, then a preliminary assessment or site investigation (PA/SI), then placement on the Superfund list. Next, EPA conducts a remedial investigation (RI) which determines the nature and extent of contamination. This information supports a feasibility study (FS) of available cleanup options. The RI/FS process concludes with an EPA recommendation on a preferred cleanup method, which is publicized during a 30-day public comment period.

Once all comments are considered, EPA chooses a cleanup method and announces a Record of Decision or ROD. The last two steps are to create a detailed cleanup plan, called a remedial design (RD), and then clean up the waste during remedial action (RA).

volved in the decision-making process by developing two-way communications between the affected community and EPA. It focuses on answering the community's questions about the cleanup effort, and providing information to the community about site activities.

A Community Involvement Plan (CIP) will be developed to provide information to the affected community and to gather community concerns, issues and questions. It will include interviews with local residents and other interested parties, and comments received by EPA.

Documents, comments and other information concerning the site will be available for public review at an Information Repository (IR). The IR includes general information about Superfund, newspaper notices and the Administrative Record for the site. The Administrative Record is a special file that contains all the information used by EPA to make its decision on the selection of a cleanup remedy. The purpose of making the Administrative Record available to the public is to help the community make informed comments on the selection of the method of cleaning up the site.

The Alark Hard Chrome Superfund Information Repository is located at the Riverside Public Library, 3581 Mission Inn Ave, Riverside, CA, 92501. Alark Hard Chrome site records are also located at the EPA Superfund Records Center, 95 Hawthorne, Suite 403S, San Francisco, CA, 94105.

A number of public meetings and a formal comment period will occur as more site information becomes available. Typically, these times include the release of the remedial investigation and the choice of the preferred cleanup method. These meetings and comment period will be announced through fact sheets, like the one you are reading, and through public notices.

An EPA Community Involvement Coordinator, David Cooper, has been assigned to work with the community on the Alark Hard Chrome Site. He is available to answer questions, maintain the fact sheet mailing list and coordinate community involvement activities, including the Technical Assistance Grant (TAG) program. Contact information can be found on the back page.

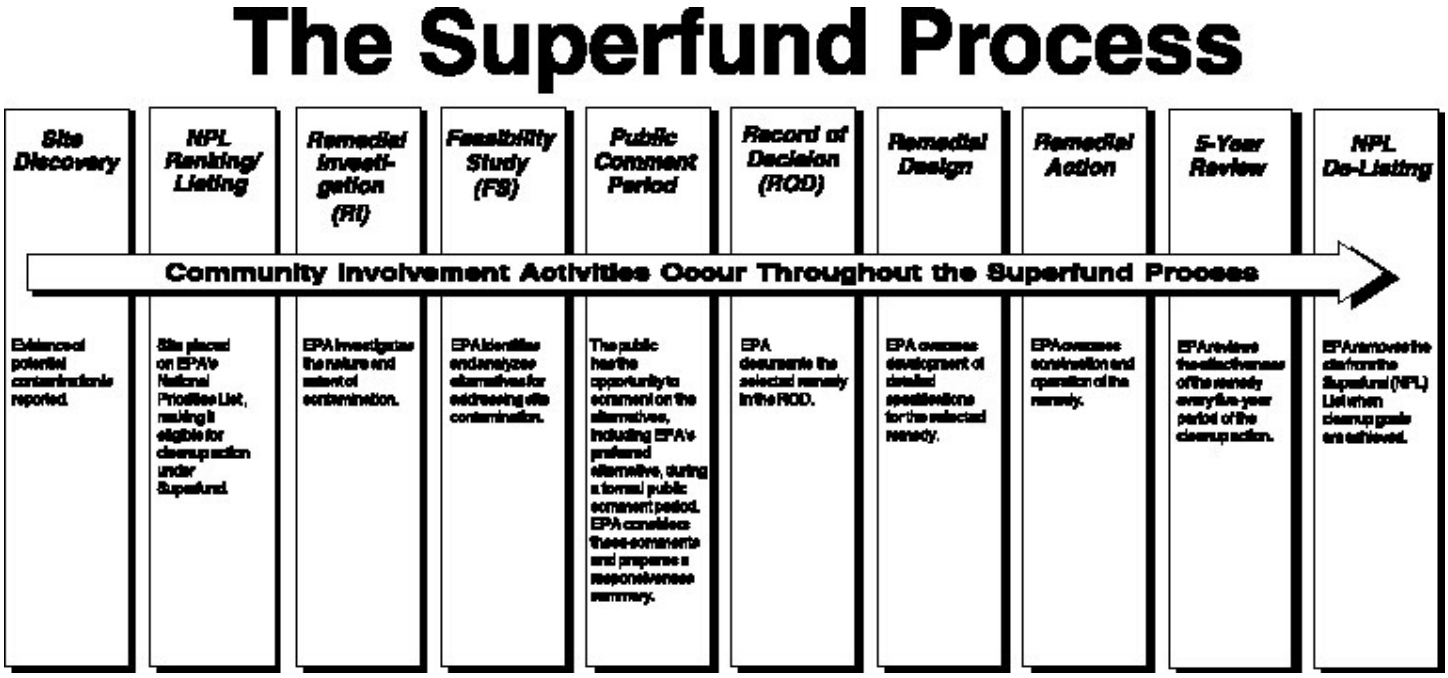

Figure 3: The Superfund Process

Technical Assistance Grant available

The Technical Assistance Grant (TAG) program helps people affected by Superfund site activity understand technical issues and data concerning site work, particularly the selection of a final cleanup method. This enables people to better express their opinions and concerns during the decision-making process. Community groups use TAG funds to hire a technical advisor to review conditions at the site, the nature of the wastes involved, and the kinds of technologies available to clean up the site. Interested groups should contact David Cooper at the numbers on the back of this fact sheet.

The repositories for the Alark Hard Chrome Administrative Record are:

Riverside Public Library
3581 Mission Inn Ave., Riverside, CA 92501
(909) 826-5201
Hours: Mon, Tue, 10am-8pm
Wed through Sat, 10am-6pm

Sun, 12n-5pm
EPA Records Center
95 Hawthorne St. 4th floor, San Francisco, CA 94105
(415) 536-2000
Hours: Mon-Fri, 8am-5pm
Sat, Sun, Closed

If you would like to be included on the mailing list to receive future mailings about the Alark Hard Chrome Superfund Site, please fill out the coupon below and return to:

David Cooper, Community Involvement Specialist
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105

PLEASE PRINT ALL INFORMATION

NAME: _____

ADDRESS: _____

_____

*PHONE: _____

*FAX: _____

*E-MAIL: _____

*ORGANIZATIONAL AFFILIATION:

_____

*(*Optional items)*
You may also provide the above information via e-mail to: Cooper.David@.epa.gov

FOR MORE INFORMATION

For more information on the Alark Hard Chrome Superfund Site, please contact:

David Cooper
Community Involvement Coordinator
415-744-2179
Email: cooper.david@epa.gov

David Stensby
Remedial Project Manager
415-744-2130
Email: stensby.david@epa.gov

U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105

or leave a message on EPA's toll-free information line:
(800) 231-3075

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