Fact Sheet
March 2002

Former Mercury Dry Cleaners Site

2714 Pinole Valley Road, Pinole

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

State Announces the Availability of Removal Action Workplan

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. The Department's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

INTRODUCTION

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) has prepared this fact sheet to inform the public about the proposed cleanup activities at the Former Mercury Dry Cleaners Site (Site) located at 2714 Pinole Valley Road in Pinole, Contra Costa County, California (Figure 1).

DTSC has prepared a draft Removal Action Workplan (RAW) which recommends digging up the contaminated soil and taking it to an approved offsite disposal facility and an in-place groundwater treatment. In accordance with the **California Environmental Quality Act (CEQA)**, DTSC has prepared a Notice of Exemption for the project.

This fact sheet provides information on opportunities for public involvement, describes the contamination present at the Site, specifies the removal action goal, and discusses the alternative methods evaluated to achieve this goal. This information is discussed in detail in the Draft RAW which is now available for public review and comment at the information repositories (see For More Information Box).

Terms in Bold are described in the Glossary on page 5

PUBLIC PARTICIPATION
Comment Period

DTSC invites the public to comment on the Draft Removal Action Workplan (RAW) during a 30-day public comment period which begins **March 25, 2002** and runs through **April 23, 2002.**

Written comments must be postmarked no later than **April 23, 2002** and should be addressed to Remedios Sunga, 700 Heinz Avenue, Suite 200, Berkeley, CA 94710-2721. Email comments to rsunga@dtsc.ca.gov

At the close of the public comment period, DTSC will carefully consider public comments received before finalizing the RAW. A response to comments document will be prepared and placed in the information repositories A copy of the response to comments will be mailed to individuals or organizations who submitted comments to DTSC.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demands and cut your energy costs, see our website at www.dtsc.ca.gov.

SITE DESCRIPTION AND BACKGROUND

The Site is located within a retail shopping mall known as the Pinole Valley Shopping Center, which is currently owned by BarFinance, Inc., an affiliate of Bank of America. The shopping center covers approximately 5.5 acres, and includes three buildings surrounded by asphalt pavement.

The Former Mercury Dry Cleaners occupied the northernmost end space of the shopping center from 1959 to 1993. The dry cleaning operations ceased in 1993 and the unit has been unoccupied since then The Site (area of contamination) includes part of the shopping center formerly occupied by Mercury Dry Cleaners.

The shopping center is bounded by Caltrans right-of-way embankment (which is unpaved), up to Interstate 80 to the north, Pinole Valley Road to the east, and Pinole Creek to the south and west.

The shopping center area is relatively flat. Pinole Creek flows northward through an approximately 10-foot deep gully approximately 250 feet west of the former dry cleaning facility. Pinole Creek drains to San Pablo Bay approximately 6,600 feet northwest of the Site.

SITE INVESTIGATIONS

Site investigations found soil and groundwater contamination in a parking area behind the facility where solvent filters were alleged to have been dumped. Contaminants detected include **tetrachloroethene or perchloroethene (PCE)** and its break down chemicals. PCE is a colorless liquid typically used as dry cleaning and degreasing solvents.

At least seven phases of soil, surface water and/or groundwater investigations have been conducted at the Site from 1989 to 1997, including an investigation to identify potential impacts to nearby surface water of Pinole Creek. Groundwater was encountered at nine feet below ground. PCE was detected in soil and groundwater at the Site, primarily near the paved driveway behind the former cleaning facility at the alleged filter dumping location. The contaminants were not detected in surface water.

Results of the sampling activities indicated that approximately 450 cubic yards of soil are contaminated with elevated levels of PCE and its breakdown chemicals. The same contaminants were detected in the groundwater. Cleanup actions are necessary to remove the source of groundwater contamination in the soil.

In its present state, the Site does not pose a health risk because the Site is covered with a building and pavement therefore there is no direct contact.

A **chemical oxidation** pilot study was conducted in November 2000 using **potassium permanganate** for in place cleanup of contaminants in soil and groundwater. The contaminant concentrations in soil were reduced below the cleanup levels. However, the groundwater requires further treatment or cleanup. Removal of soil with elevated contaminant concentrations is proposed to eliminate or reduce the source of contamination in groundwater.

REMOVAL ACTION WORKPLAN

Cleanup Goal

The goal of the removal action at the Site is to achieve risk levels for contaminants of concern in soil and groundwater that are considered acceptable by DTSC for protection of public health and the environment and for unrestricted land use. To achieve this removal action goal, cleanup levels for soil and groundwater contaminants were set at residential standards for soil and at **maximum contaminant levels** (**MCLs**) in drinking water for groundwater.

Alternatives Considered

A draft RAW has been prepared which evaluates several remedial alternatives. These were evaluated based on effectiveness in protecting the public health and the environment, implementability and cost.

The five remedial alternatives that were evaluated are summarized below. A detailed description of each alternative is included in the draft RAW.

1) No Action. No cleanup actions would be conducted at the Site. This alternative is a baseline against which other alternatives can be evaluated.

2) Passive **Biodegradation**. This alternative involves naturally occurring microorganisms that break down the contaminants to nontoxic chemicals.

3) Chemical Oxidation. This alternative involves injecting an oxidizing agent, such as potassium permanganate, into the subsurface to break down the contaminants.

4) Soil Excavation/Offsite Disposal and Enhanced Biodegradation. Contaminated soils would be excavated and disposed at an approved landfill. Then a patented chemical would be placed in the excavation to enhance the destruction of contaminants in groundwater.

5) Groundwater Pump and Treat. This involves groundwater extraction and treatment before disposing to sewer or storm drain. The most widely used treatment involves filtering the groundwater through activated carbon to the remove the contaminants.

Recommended Alternative

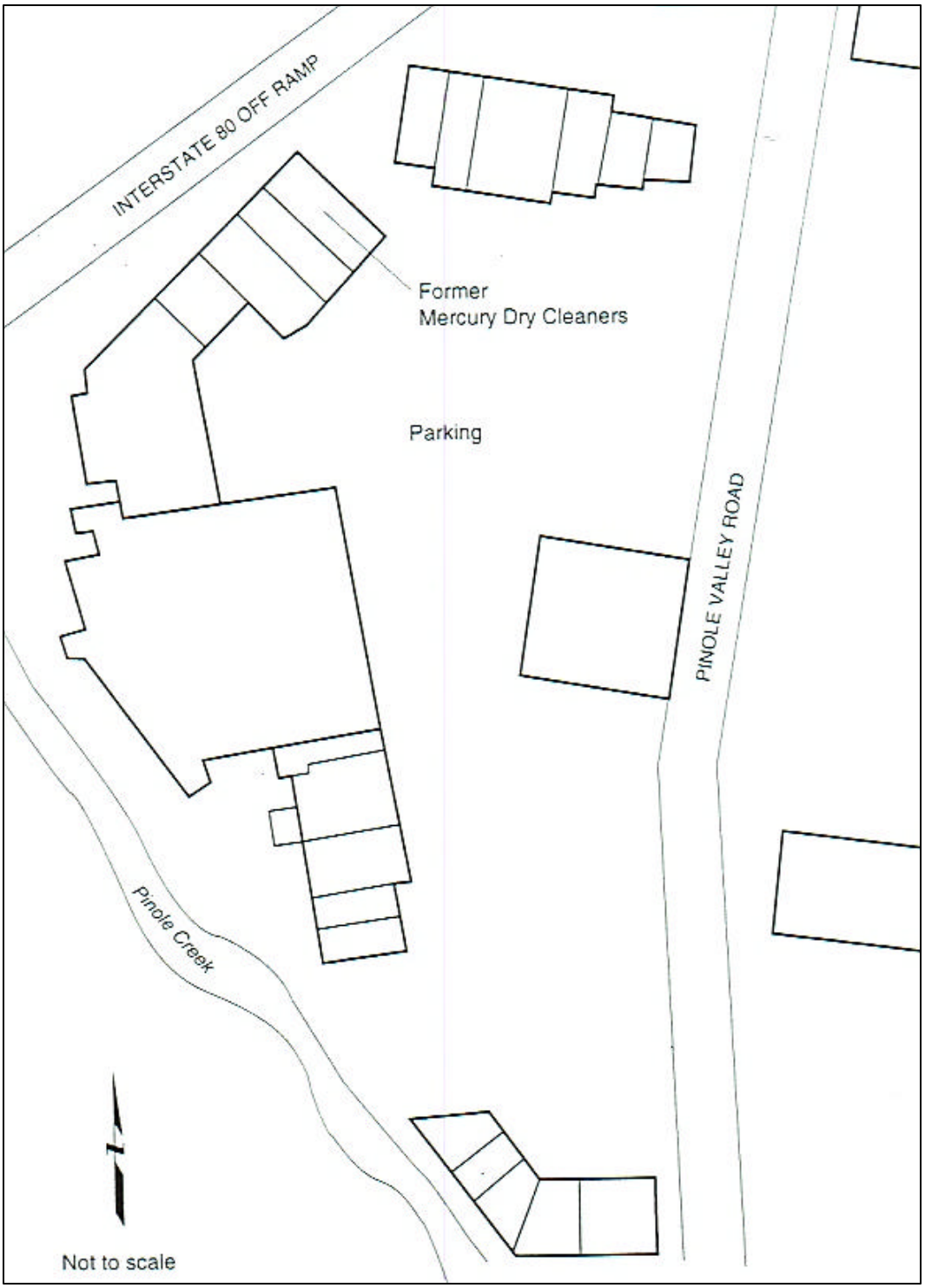
DTSC is recommending Alternative 4 (Soil Excavation/Offsite Disposal and Enhanced Biodegradation) as the preferred alternative because it is protective of public health and the environment and is economically feasible.

This alternative involves removing contaminated soils in a 20 feet by 20 feet area to a depth of 20 feet to remove the continuing source of groundwater contamination. Approximately 450 cubic yards of soils (about sixty truckloads) will be removed, stockpiled, loaded into trucks and hauled to a permitted disposal facility. Additional sampling will be done to verify that the remaining soil concentrations meet the cleanup levels. Clean imported fill, that meets residential standards, will be placed in the excavation and graded to match the existing ground surface. The excavated area will be repaved and/or restored to its original condition, to the extent possible.

The groundwater will be treated to enhance the biodegradation of the contaminants in groundwater. Biodegradation is a naturally occurring process mediated by microorganisms. The process will convert the toxic contaminants to nontoxic chemicals, such as water and carbon dioxide.

Air monitoring will be conducted and a Health and Safety Plan will be implemented to ensure that the workers and the public are protected during the cleanup activities.

Figure 1 – Site Map



California Environmental Quality Act

DTSC has determined that the proposed removal action is exempt from CEQA and would have no impact on the environment. The exemption was based on the small volume of contaminated soil that will be removed, the limited excavation area, and the short duration of the project. The groundwater is not used for drinking. Therefore, DTSC has prepared a Notice of Exemption in compliance with CEQA for the project.

Sensitive Receptors Near the Site

DTSC considers schools, daycare centers, and places of worship to be sensitive receptors. The closest residential area is located approximately 400 feet southwest of the Site, across Pinole Creek. The closest school is approximately 0.25 mile. The closest place of worship, child care facility, senior center and hospital are about one mile from the Site.

DTSC does not believe that the proposed remediation will impact any of the closest sensitive receptors

Contingency Alternative

The RAW includes a contingency alternative that may be implemented in the event that the recommended alternative is not effective in achieving the groundwater cleanup levels. Alternative 5 (Groundwater Pump and Treat) is the contingency alternative to cleanup the groundwater contamination at the Site.

Glossary of Terms

Biodegradation – A process that destroys organic contaminants by soil microorganisms. The microbes obtain their food and energy directly from the destruction of the organic chemicals. The organic contaminants are converted to carbon dioxide and water which are nontoxic.

California Environmental Quality Act (CEQA) – A California law that of all actions with possible environmental impacts (for example, development and cleanup actions. The Act applies generally to all activities undertaken by state and local agencies, and to private activities financed, regulated, approved by the state and local agencies.

Chemical Oxidation – A process that destroys organic contaminants using oxidants such as hydrogen peroxide, potassium permanganate and ozone. The organic contaminants are converted to carbon dioxide and water which are nontoxic.

Hydrogen Releasing Compound (HRC) – A patented biodegradable food grade compound used to stimulate the growth of microorganisms that destroy organic contaminants.

Maximum Contaminant Level (MCL) – A level established by the California Department of Health Services or the US Environmental Protection Agency that identifies the concentration of a substance in drinking water that may present a health risk when exceeded.

Potassium Permanganate – Dark purple crystals soluble in water. It is used as oxidizer, disinfectant, and in air and water purification. It can oxidize or convert organic contaminants, such as PCE, into nontoxic substances.

Tetrachloroethene or Perchloroethene (PCE) – A colorless liquid used as a dry-cleaning and degreasing solvent.

For More Information

If you have questions or would like more information on the Former Mercury Dry Cleaners Site, please call: Remedios Sunga, DTSC Project Manager, (510) 540-3840, rsunga@dtsc.ca.gov; or Rachelle Maricq, DTSC Public Participation Coordinator, (510) 540-3910, rmaricq@dtsc.ca.gov. For media questions, call Angela Blanchette, DTSC Public Information Officer, 510-540-3732, ablanchette@dtsc.ca.gov.

The Draft Removal Action Workplan and related documents for the Former Mercury Dry Cleaners Site are available for public review at:

DTSC
700 Heinz Avenue
Berkeley, California 94710-2721
510) 540-3800
Call for an appointment

Pinole Public Library
2935 Pinole Valley Road
Pinole, California 94564-1491
(510) 758-2741

The full administrative record is available at the above DTSC office.

TDD Notice to Hearing Impaired users can obtain additional information about the Site by using the California State Relay Service (1-888-877-5378) to reach Rachelle Maricq, Public Participation Coordinator at (510) 540-3910.

Rachelle Maricq, Public Participation Coordinator
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