

# Cleanup and Corrective Action Update



## Tyco Electronics Facility, 300-314 Constitution Drive, Menlo Park, California

*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 Department of Toxic Substances Control (DTSC) is providing this fact sheet to inform interested community members about the current status of environmental cleanup activities at the Tyco Electronics (formerly Raychem) facility, located at 300-314 Constitution Drive in Menlo Park, California (see Figure 1).

DTSC is evaluating the potential need for additional cleanup and/or monitoring activities to address contamination of soil and groundwater remaining at the Tyco facility after several interim remedial measures were completed during the last several years.

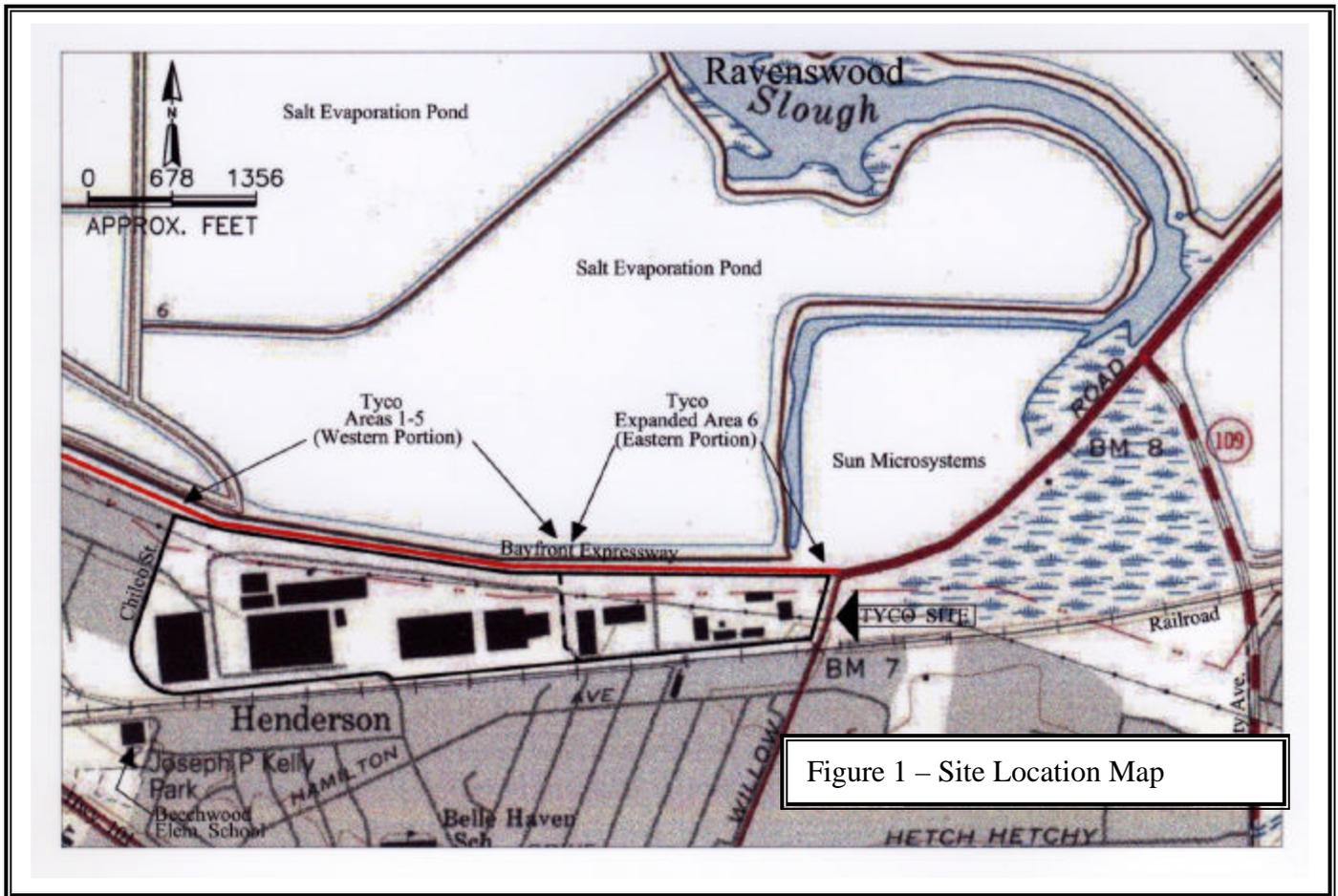
This fact sheet addresses on-site soil and groundwater conditions at the Tyco facility. Information on off-site soil and groundwater conditions will be released at a future date.

### CURRENT AND FUTURE SITE ACTIVITIES

- ✓ DTSC has recently approved three RCRA Facility Investigation Reports for the Tyco Electronics Facility. These reports characterize the extent of on-site soil and groundwater contamination at the facility.
- ✓ Approval of these reports is an important step in achieving regulatory closure for the facility.
- ✓ Under DTSC oversight, independent environmental consultants working with Tyco will complete a Corrective Measures Study to identify and evaluate methods that might be appropriate to further cleanup and/or monitor contaminants remaining at the site.
- ✓ Upon DTSC approval of the Corrective Measures Study, public review and comment will be solicited for a period of 30 days.
- ✓ Information on how the community can become involved in this process is contained on page 7.

### What's Inside

Site History.....	p. 2
RCRA Corrective Action Process. .	p. 2-6
Human and Ecological Risk Assessment.....	p. 6
For More Information.....	p. 7
Future Actions.....	p. 7



## SITE HISTORY

The site and adjacent areas were formerly undeveloped marshland, with the exception of a privately owned asphalt batch plant that was located on the central eastern part of the property.

From 1965 to 1968, Raychem Corporation purchased and developed the 82 acres that now comprise the site. Site operations historically consisted of the development, manufacture and sale of high-technology plastic and electrical insulation products.

In 1999, Raychem merged with Tyco International and was reorganized into the Tyco Electronics business unit. Currently the Tyco Electronics facility is involved primarily in the manufacture and distribution of plastic products.

## RCRA CORRECTIVE ACTION PROCESS

From 1983 to 1988, Tyco operated under a Hazardous Waste Facility permit issued by DTSC. This permit allowed the facility to store and treat hazardous wastes resulting from on-site manufacturing operations. In 1988, it was determined that routine site operations could be modified so that a RCRA permit was no longer needed. In 1997, aboveground units (such as waste water treatment tanks) that formerly operated under the RCRA permit were closed. This closure was approved by DTSC.

As a condition of the past permit, Tyco is required to investigate and address all historic releases of hazardous waste and materials that may have occurred at the facility.

This investigation and cleanup is called the RCRA Corrective Action process and is conducted with oversight provided by DTSC.

The RCRA Corrective Action process has four main steps (see Figure 2). These steps and how they relate to the Tyco facility are described below.

## STEP 1

**RCRA Facility Assessment (RFA):** The RFA evaluates past operating practices and historical uses of the site and identifies areas where spills, leaks or other chemical releases either occurred or could have occurred. This process involved the review of facility records, management practices, government agency files, interviews, visual site inspections and preliminary sampling. In September 1989, DTSC completed the RFA Report for the Tyco facility (this report and other documents are available for public review at the local information repository described on page 7).

**RFA Findings:** A total of 21 units or locations were identified during the RFA and subsequent investigations. A “unit” is a container, tank or particular location where a chemical release has or may have occurred. Based upon the findings of the RFA, DTSC concluded that further investigation was necessary to better understand the contamination at the facility and required Tyco to conduct a RCRA Facility Investigation.

## STEP 2

**RCRA Facility Investigation (RFI):** The RFI defines the source, nature and extent of contamination for

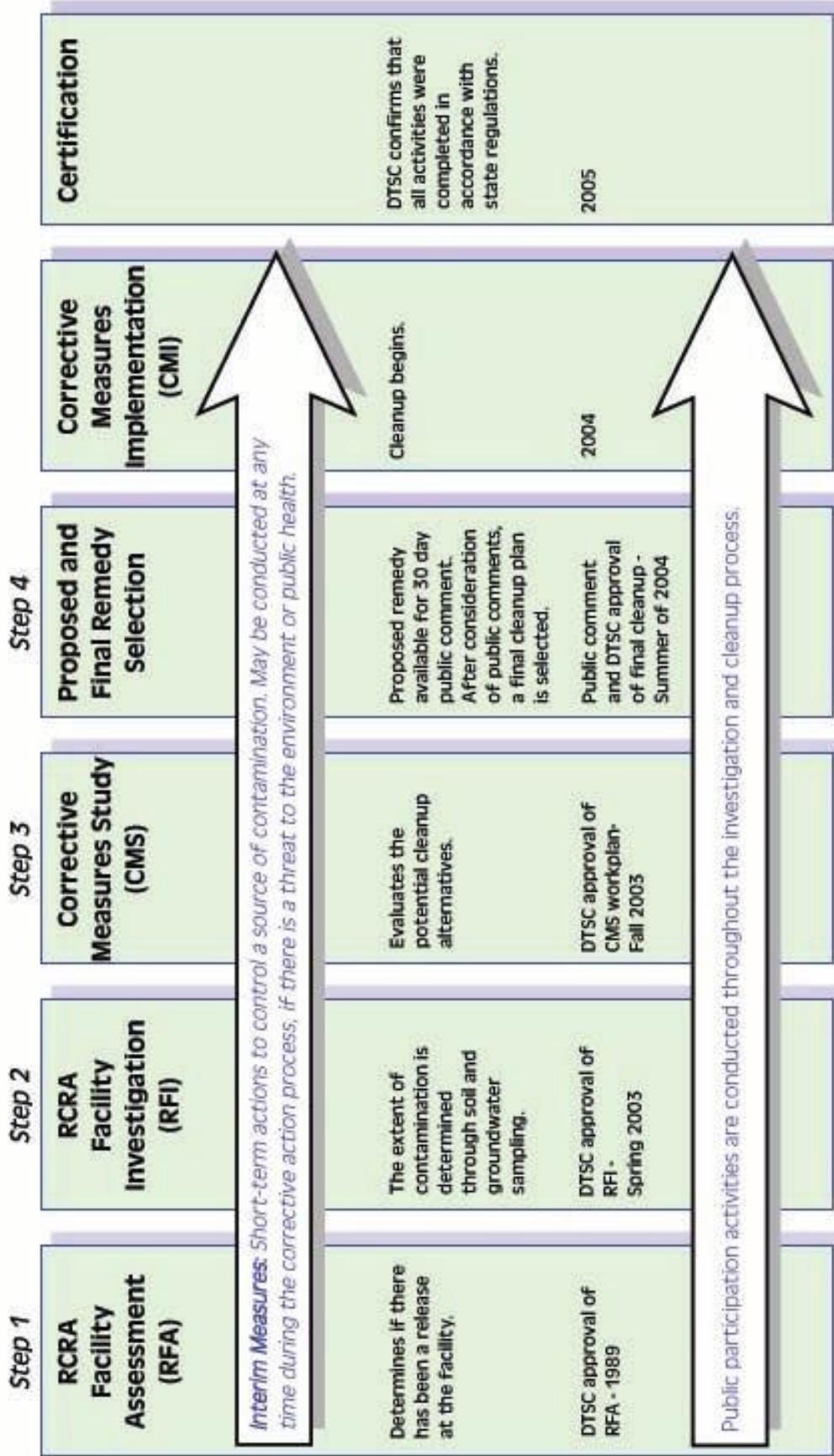
units identified in the RFA. This additional investigation helps in determining if further action is needed for these locations. Tyco submitted an RFI Workplan that was approved by DTSC in October 1999. This Workplan outlined scientific methods to sample and analyze on-site soils, sediment and groundwater to determine the areas of contamination. Tyco’s RFI provides information on on-site and off-site conditions. In Spring 2003, DTSC approved the Tyco RFI Reports for on-site soils and groundwater.

**Interim Remedial Measures (IRMs):** During the RFI phase, Tyco implemented five separate IRMs which were approved by DTSC. IRMs are actions that can be taken at any time to reduce or eliminate threats to human health and the environment. At the Tyco facility, these measures included the excavation and off-site disposal of about 4,000 cubic yards of highly contaminated soil, to reduce the potential impact to groundwater at the site.



*4,000 cubic yards of contaminated soil have been removed from the site.*

# Corrective Action Process



**RFI Findings:** The RFI Reports document localized areas of volatile organic compounds, semi-volatile organic compounds, PCBs, dioxins and dibenzofurans in soil at the Tyco facility. In some areas of the site, these releases to soils have impacted the shallow groundwater beneath the site. The RFI did not identify any off-site sources that may be contributing to on-site contamination, except for one area in the northwest portion of the facility, where a possible past chemical release into the roadside drainage may be impacting the site.

### STEP 3

**Corrective Measures Study (CMS):** The purpose of the CMS is to investigate and evaluate potential cleanup options and methods for the units identified in the RFI, and decide which method would be the best choice for each unit. The CMS Workplan details how each unit will be investigated and evaluated to:

- Characterize the risk to human health and the environment

- Establish cleanup standards, and
- Evaluate potential cleanup alternatives

Using information contained in the RFI, DTSC determined which areas require further action during the CMS phase of the RCRA Corrective Action process.

DTSC approved the CMS Workplan in October 2003. The CMS Workplan evaluates two alternatives to treat and/or contain contaminated soil: capping and soil excavation with off-site disposal at an approved facility.

### STEP 4

#### **CMS Report Approval and Remedy**

**Selection:** The information collected during the CMS phase is summarized in a CMS Report and is used to determine which technologies will be recommended for site cleanup.

The CMS Report, which addresses on-site soil and groundwater cleanup for the Tyco site, will be submitted in December 2003.



*Groundwater monitoring shows that chemicals in groundwater are declining naturally over time.*

DTSC will evaluate the effectiveness of IRMs already completed and corrective measures proposed in the CMS Report.

Based on this evaluation, DTSC will approve actions for the facility. The actions will be evaluated against the following standards:

- Protectiveness of human health and the environment.
- Attainment of stated cleanup standards as determined by the risk assessments.
- Control of the source of release(s) to reduce or eliminate--to the maximum extent practicable--further releases that might pose a threat to human health and/or the environment, and
- Compliance with all applicable waste management requirements.

During this phase of the RCRA Corrective Action Process, the public will be able to review and comment on the remedy selections during a 30-day public comment period. Public review will allow the community to provide DTSC with input on the CMS Report conclusions prior to a final decision by DTSC.

## HOW DTSC USES RISK ASSESSMENTS

DTSC uses risk assessments to determine if chemicals at a site may be harmful to people or the environment and to establish maximum allowable levels at each site where chemicals have been released into the environment. Inorganic materials (such as metals) and organic materials (such as solvents) will be cleaned up to levels considered safe for the way the land will be used. These cleanup levels are called risk-based or health-based standards.

### Human Health Risk Assessment (HRA):

The HRA estimates the potential risks to human health from the chemical contamination in soil, sediments, groundwater or surface water. Such an assessment consists of four steps:

1. Identify harmful chemicals in soil, sediments, groundwater and surface water
2. Examine the degree to which people might be exposed to the identified chemicals.
3. Assess the toxicity, or harmfulness of each chemical to determine health effects (chemicals are evaluated in two categories: those known to cause cancer and those that do not cause cancer, but could have other negative health effects) and,
4. Combine the results of the first three steps to estimate the risks to human health.

This four-part process estimates the chance that contact with chemicals from a facility will harm people. This process gives DTSC numbers that show how great (or small) these risks may be. It also identifies various populations that are at risk, what is causing the risk, and how sure DTSC is about the numbers.

Human health risks were identified at the Tyco facility using data on soil, groundwater, surface water and sediment, as well as air samples, collected during the RFI investigations and IRMs. Potential human exposures could involve touching, eating or breathing contaminated soil, water and/or air.

Tyco is completing two human health risk assessments for the western and eastern portions of the facility. Preliminary results show that the site, in its current condition, presents no significant risk to on-site workers or the surrounding community.

**Ecological Risk Assessment (ERA):** The ERA is similar to the HRA, except that its purpose is to evaluate the potential impacts from a site on the surrounding environment and animals.

Both an on- and off-site ecological risk assessment are being completed for the Tyco facility. A scoping ERA that outlines the scope of the on-site ecological assessment for the eastern end of the site was submitted to DTSC in October 2003. This document states that there are no sensitive receptors on this portion

of the site. A scoping ERA for the western portion of the site and an off-site ecological risk assessment will be submitted to DTSC in winter 2003.

## **FUTURE ACTIONS**

Future DTSC and Tyco actions to address contamination at the Menlo Park facility will include:

### **By Tyco:**

- Completion and submittal of the HRA reports for the western portion (Areas 1-5) of the site (to be submitted to DTSC in fall 2003).
- Completion and submittal of the CMS Report, addressing on-site soil and groundwater (to be submitted to DTSC in December 2003).
- Completion and submittal of ERA reports for the western portion of the site and for off-site areas (to be submitted to DTSC in winter 2003).
- Continuation of periodic groundwater monitoring to fully document groundwater conditions and movement.
- Implementation of remedies approved by DTSC.

### **By DTSC:**

- Review and approval of the HRA Reports.
- Review and approval of the CMS Report.
- Review and approval of the ERA Reports.
- Selection and approval of preferred remedies.

## **OPPORTUNITIES FOR PUBLIC INVOLVEMENT**

**Comment Periods:** DTSC will hold a 30-day public comment period to provide the community with an opportunity to review and comment on the CMS Report. DTSC requests questions, comments or additional information from the public. A public notice of the comment period will be published in local newspapers and distributed via the mailing list described below. Community members will be able to provide written comments via U.S. or electronic mail. A written response to all

comments will be prepared and distributed to all parties on the facility mailing list.

**Mailing List:** Over the life of this project, Tyco and DTSC have put together a mailing list of interested members of the public. If you did not receive this notice in the mail and would like to be put on the mailing list, please contact Jesus Cruz, DTSC Public Participation Specialist, at (510) 540-3933 or [jcruz@dtsc.ca.gov](mailto:jcruz@dtsc.ca.gov).

## **NOTICE TO HEARING IMPAIRED INDIVIDUALS**

TDD users can obtain additional information about the site by using the California State Relay Service (1-888-877-5378) to reach the Public Participation Specialist, Jesus Cruz at (510) 540-3933.

### **FOR MORE INFORMATION**

**Information Repositories:** The Tyco RFA, RFI and Public Participation Plan are available for review at the following locations:

Menlo Park Library  
Belle Haven Branch  
413 Ivy Drive  
Menlo Park, California  
(650) 329-0145

DTSC Berkeley Office  
700 Heinz Avenue  
Berkeley, California  
(510) 540-3800, please call for appointment

**Contacts:** If you have questions or concerns please contact the following DTSC staff:

Walter Bahm, DTSC Project Manager  
(510) 540-3957  
[wbahm@dtsc.ca.gov](mailto:wbahm@dtsc.ca.gov)

Jesus Cruz, DTSC Public Participation  
(510) 540-3933  
[jcruz@dtsc.ca.gov](mailto:jcruz@dtsc.ca.gov)

**Media Contact:** Members of the media please contact the following individual:

Angela Blanchette  
DTSC Public Information Officer  
(510) 540-3732  
[ablanche@dtsc.ca.gov](mailto:ablanche@dtsc.ca.gov)

## GLOSSARY OF TERMS

**Corrective Measures Study (CMS) Workplan** – Describes how the Corrective Measures Study will be conducted.

**Corrective Measures Study (CMS) Report** – Evaluates the cleanup methods. DTSC will review the proposed methods and will request public input in the final selection of remedies.

**Dioxins and Dibenzofurans** - A group of generally toxic organic compounds that may be formed as a result of incomplete combustion. They are highly toxic and are rapidly absorbed from the skin and gastrointestinal tract.

**Health risk assessment** - A study prepared to assess health and environmental risks due to potential exposure to hazardous substances.

**Interim Remedial Measures**– Short-term actions to control a source of contamination. May be conducted at any time during the corrective action process, if there is a threat to the environment or public health

**Polychlorinated biphenyls (PCBs)** - A group of toxic chemicals used for a variety of purposes including electrical applications, carbonless copy paper, adhesives and hydraulic fluids. PCBs do not break down easily and are listed as cancer causing agents under Proposition 65.

**RCRA Facility Assessment (RFA)** – Identifies where spills, leaks, or other releases occurred or could have occurred based on past practices and historical uses.

**RCRA Facility Investigation (RFI)** – Investigates areas identified in the RFA. Defines source, nature and extent of any contamination.

**Semi-volatile organic compounds (SVOCs)** – A group of solvents that partially evaporate, or change from liquid to gas at normal temperatures.

**Volatile organic compounds (VOCs)** – A group of solvents that readily evaporate at temperatures normally found at ground surface and at shallow depths.

Jesus Cruz  
DTSC  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710

**INSIDE: Information about environmental activities at the Tyco Menlo Park facility.**