

APPENDIX E

STATUS OF CLEANUP AT ALAMEDA COUNTY

CONTAMINATION SITES

ALAMEDA CALDERON SITES *

Rank 2

Borden Chemical
Pleasanton Garbage Service
Pacific States Steel

Rank 3

Durham Road Landfill
Turk Island Landfill
Eastern Alameda Landfill

Rank 4

Southern Pacific Railroad - W. Oakland site

Rank 5

Berkeley Landfill
Therm-Tec of CA
Fiberboard - Emeryville
West Beach Sanitary Landfill (U.S. Navy)

Rank 6

Albany Landfill
FMC Newark
San Leandro Landfill
Trans America Pelaval
Davis Street Landfill
San Leandro Marina/Tony Lema
Thoro Systems Products

Rank 7

City of Alameda Landfill
Diamond Tank Line

Rank 8

Alameda Naval Air Station
Newark Dump
Emeryville Ashby

Oakland Rubbish

Rank 9

Mowry Road (Newark)

Rank 10

Oakland Street Department
West Winton

Rank 11

All Cities
Emeryville Dump (65th/Bay)

Rank 12

Hayward

*The Calderon rankings are in order of the importance of the site for review for impact on water quality. No inference of contamination or need for cleanup is intended.

State of California
Health and Welfare Agency

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

SEVENTH STREET PROPERTIES - WAREHAM PROPERTIES

I. Site Information

A. Location and Type of Site

2900 Fifth Street and
700 Heinz Avenue
Berkeley, CA 94710
Alameda County

This site was formerly owned by Durkee Famous Foods and then by Agricom International and Agricom Oilseeds, Inc. It was used for the production of vegetable oils and foods. The site is currently owned by Wareham Development.

B. Description of Hazardous Wastes

This site contains numerous drums of acids, very strong bases, and a variety of other chemicals. Unknown oily liquid has been found in tanks on the property, some of which has spilled on the ground.

C. Threat to Public Health and Environment

The site is easily accessible to the general public and the hazardous materials are poorly contained or not contained at all. Joggers often pass through the site on their way to or from an adjacent park and wildlife refuge.

II. Site Status

A. Status of Site Activity

On July 23, 1985, a Department of Health Services (DHS) inspection revealed many violations or conditions requiring correction.

By January 20, 1986, considerable site characterization had been performed.

B. Projected Revenue Sources

The current owner, Wareham Development, has paid for work performed to date. Agricom has filed bankruptcy.

EXPENDITURE PLAN FOR THE
HAZARDOUS SUBSTANCE CLEANUP BOND ACT
OF 1984

Revised January, 1987
(Originally Published January 1985)
Revision No. 2

Department of Health Services

Kenneth W. Kizer, M.D., M.P.H.
Director

Alex R. Cunningham
Chief Deputy Director

C. David Willis
Deputy Director

Toxic Substances Control Program

The responsible parties (RPs) have entered into an enforceable agreement with DHS for oversight/monitoring of their cleanup efforts. DHS has budgeted 50,000 for related costs to the project. The RPs will pay all costs associated with site cleanup.

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

AMCHEM PRODUCTS

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based upon current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| <u>1. Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Aug. 1986</u> |
| c) Feasibility Study | c) <u>Dec. 1986</u> |
| <u>2. Remedial Action Plan</u> | <u>March 1987</u> |
| <u>3. Remedial Action</u> | |
| a) Design | a) <u>May 1987</u> |
| b) Implementation | b) <u>July 1987</u> |
| c) Certification | c) <u>Sept. 1987</u> |
| <u>4. Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Sept. 1988</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

I. Site Information

A. Location and Type of Site

37899 Miles Boulevard
Fremont, CA 94536
Alameda County

Amchem has been operating at the site since 1952. The company manufactures acid and alkali-based cleaning compounds, and until July 1980, blended bases to form herbicide formulations such as 2,4-dichlorophenoxyacetic acid (2,4-D), 2,4,5-trichlorophenoxyacetic acid (2,4,5-T), and Silvex.

B. Description of Hazardous Wastes

Extensive hydrocarbon contamination of the soil and floating hydrocarbon on the ground water has been discovered. Significant 2,4-D and 2,4,5-T soil contamination to a depth of 15 feet was discovered during an underground tank removal. 2,4-D and 2,4,5-T are both experimental teratogens and suspected carcinogens.

C. Threat to Public Health and Environment

The site is located in a major ground water recharge area. Herbicide contaminated surface soils could also be dispersed by winds onto an adjacent residential area.

II. Site Status

A. Status of Site Activity

Numerous investigations have been conducted since February 1978 when a 2,4-D spill from a railroad tank car occurred. Current remedial investigation activities are being conducted pursuant to a directive issued by the Regional Water Quality Control Board with assistance by DHS.

B. Projected Revenue Sources

The responsible party, Amchem Products, Inc., is funding all remedial investigative activities. The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. The Department has budgeted \$50,000 for oversight/monitoring of cleanup efforts. The Department will recover 100% of direct costs plus staff costs and overhead related to the project. The RP will pay all costs associated with cleanup.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>April 1987</u> |
| c) Feasibility Study | c) <u>Feb. 1988</u> |
| 2. <u>Remedial Action Plan</u> | <u>May 1988</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Aug. 1988</u> |
| b) Implementation | b) <u>Feb. 1989</u> |
| c) Certification | c) <u>Nov. 1989</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Nov. 1990</u> |
| b) Operation and Maintenance | b) <u>10-15 years</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

BERKELEY AUTO REPAIR

I. Site Information

A. Location and Type of Site

2378/2366 San Pablo Avenue
Berkeley, CA 94702
Alameda County

This site includes an auto repair shop and a restaurant. The auto repair shop is a small building at the back of a narrow, fenced, asphalt-paved yard, and the restaurant is located to the north. There have been auto repair shops on the site for the last 8 - 9 years. Prior to that, it was an auto wrecking yard.

B. Description of Hazardous Wastes

High concentrations of methylene chloride and lead are present in the soil. The proprietor of the auto shop asserts that oil continually wells up through the asphalt.

C. Threat to Public Health and Environment

Soil is contaminated with methylene chloride, lead, and waste oils. The ground water table may be contaminated. The proprietor of the auto shop dug a trench in the parking lot to prevent the runoff of oil to the residences behind the site.

II. Site Status

A. Status of Site Activity

12/27/85: A citizen complaint was received alleging the disposal of waste oil to the ground and runoff of the oil to an adjacent piece of property.

01/10/86: The first inspection in response to citizen's complaint was performed and samples were taken.

01/15/86: The second inspection in response to citizen's complaint was performed.

02/07/86: Laboratory results of the samples taken 1/10/86 were received and indicated that elevated levels of methylene chloride and lead existed in the soil on-site.

07/02/86: A follow-up inspection was performed.

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

B. Projected Revenue Sources

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$50,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project as allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

THE CLOROX COMPANY

I. Site Information

A. Location and Type of Site

850 42nd Avenue
Oakland, CA 94608
Alameda County

Ground water sampling has identified a significant concentration of mercury.

B. Description of Hazardous Wastes

Mercury is present at a concentration of 9,600 parts per billion (ppb). Mercury attacks the gastrointestinal, respiratory and central nervous systems.

C. Threat to Public Health and Environment

Contaminated ground water eventually discharges to the Alameda Estuary which leads to the San Francisco Bay.

II. Site Status

A. Status of Site Activity

- 11/03/81: Woodward-Clyde Consultants completed an Initial Assessment Study for the Clorox site.
- 07/25/82: Woodward-Clyde Consultants initiated Phase II Investigation.
- 12/12/82: The site was ranked on the State Priority Ranking List (SPRL).
- 04/25/84: The Clorox Company submitted draft deed restrictions to the DHS for review.
- 07/19/84: The DHS determined that the filing of deed restrictions at this time was inappropriate.
- 06/01/85: Woodward-Clyde Consultants completed a Remedial Action Assessment for the Clorox site.
- 03/07/86: Woodward-Clyde Consultants submitted a draft Remedial Action Plan to the DHS.
- 03/19/86: The DHS and the San Francisco Bay Regional Water Quality Control Board held a joint public hearing concerning the Clorox site.

III. Project Completion-Estimates

The estimates shown below reflect completion of major site cleanup phases and are based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Sept. 1989</u> |
| b) Remedial Investigation | b) <u>June 1990</u> |
| c) Feasibility Study | c) <u>Jan. 1991</u> |
| 2. <u>Remedial Action Plan</u> | <u>April 1991</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>July 1991</u> |
| b) Implementation | b) <u>Jan. 1992</u> |
| c) Certification | c) <u>March 1993</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>March 1993</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

B. Projected Revenue Sources

The DHS will be issuing a remedial action plan or entering into an enforceable agreement with the responsible parties. The Department has budgeted \$50,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based upon current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|---------------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Completed</u> |
| 2. <u>Remedial Action Plan</u> | <u>Completed</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Oct. 1986</u> |
| b) Implementation | b) <u>April 1987</u> |
| c) Certification | c) <u>June 1987</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>June 1988</u> |
| b) Operation and Maintenance | b) <u>10-15 years</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

EKOTEK LUBE

I. Site Information

A. Location and Type of Site

4200 Alameda Avenue
Oakland, CA 94605
Alameda County

Waste oil, contaminated with benzene, toluene, phenol, and lead, had been stored in tanks and had been spilled onto the soil.

B. Description of Hazardous Wastes

Benzene is suspected carcinogen and is moderately toxic by ingestion, inhalation, and skin absorption. Metallic lead is toxic by ingestion and inhalation of dust or fumes. Tetraethyl lead (gasoline additive) affects the central nervous system via inhalation or via absorption through the skin. Phenol has a markedly corrosive effect on tissue; however, the main effect is upon the central nervous system. Toluene depresses the central nervous system.

C. Threat to Public Health and Environment

Over 100,000 people live within a 2 mile radius of the site. A coastal wetland is located 4000 feet away. Arrowhead marsh is 1.4 miles away. The depth to ground water is from 5 to 28 feet. Approximately 18 irrigation and industrial wells are within 3 miles.

II. Site Status

A. Status of Site Activity

07/23/84: United States Coast Guard (USCG) conducted a preliminary investigation of Ekotek Lube.

08/03/82: USCG referred the case to the Department of Health Services.

08/03/84: The Department referred the case to the United States Environmental Protection Agency.

B. Projected Revenue Sources

The current owner of the site is Intercoastal Oil. DHS has budgeted \$50,000 for related direct costs. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|---------------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>July 1987</u> |
| b) Remedial Investigation | b) <u>Nov. 1987</u> |
| c) Feasibility Study | c) <u>March 1988</u> |
| 2. <u>Remedial Action Plan</u> | <u>June 1988</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Aug. 1988</u> |
| b) Implementation | b) <u>Oct. 1988</u> |
| c) Certification | c) <u>Dec. 1988</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Dec. 1989</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

ELECTRO COATINGS

I. Site Information

Location and Type of Site

Emeryville, CA 94617
Alameda County

This site is a plating facility which disposed of chromium waste to an on-site disposal pit.

Description of Hazardous Wastes

Chromium has been detected in the soil and the ground water.

Threat to Public Health and Environment

The primary route of exposure is through the migration of chromium to the ground water and San Francisco Bay by surface run-off.

II. Site Status

Status of Activity

A cleanup plan was submitted to the Regional Water Quality Control Board (RWQCB). Soil and ground water sampling has been completed.

The proposed cleanup plan has not been approved.

Project Revenue Sources

Electro Coatings is the responsible party (RP) and is an active business.

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$30,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project as allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) Completed |
| b) Remedial Investigation | b) <u>June 1987</u> |
| c) Feasibility Study | c) <u>Oct. 1987</u> |
| 2. <u>Remedial Action Plan</u> | <u>Jan. 1988</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Feb. 1988</u> |
| b) Implementation | b) <u>March 1988</u> |
| c) Certification | c) <u>June 1988</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>June 1989</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

FMC CORPORATION, NEWARK

I. Site Information

A. Location and Type of Site

7887 Enterprise Drive
Newark, CA 94560
Alameda County

FMC Corporation formerly manufactured ethylene dibromide (EDB) at this facility. During its operation, substantial spillage occurred contaminating the soil and the ground water.

B. Description of Hazardous Wastes

Ethylene dibromide, 1,2-dichloroethane, bromoform, chloroform, methylene bromide, benzene, dibromochloromethane and 1-chloro-2-bromoethane all have been detected in the soil and groundwater.

C. Threat to Public Health and Environment

Surface water collects in a nearby drainage which discharges to the San Francisco Bay and Wildlife Refuge. Due to the operation of a ground water salinity extraction well/barrier project, contaminated ground water may be discharged to the San Francisco Bay if not contained and controlled.

II. Site Status

A. Status of Site Activity

During 1980-1985 FMC installed many soil borings and monitoring wells.

In April, 1985, FMC submitted an evaluation and recommendation of remedial action alternatives. A risk assessment report was also submitted.

In October, 1985, FMC began construction of remedial action alternatives.

In November of 1985, FMC completed construction of an asphalt cap and drainage system to prevent ground water infiltration and surface runoff.

In March of 1986, FMC began operation of the ground water extraction system in the Newark Aquifer (60' - 70'). Operation of this system will contain and remove the plume of contaminants within the Newark Aquifer.

B. Projected Revenue Sources

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$100,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans and completed action.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Oct. 1985</u> |
| c) Feasibility Study | c) <u>Jan. 1987</u> |
| 2. <u>Remedial Action Plan</u> | <u>April 1987</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Feb. 1988</u> |
| b) Implementation | b) <u>May 1990</u> |
| c) Certification | c) <u>July 1990</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>July 1991</u> |
| b) Operation and Maintenance | b) <u>20+ years</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

LESLIE SALT

I. Site Information

A. Location and Type of Site

Newark, CA 94560
Alameda County

A waste salt bittern and magnesia caustic piles are located on-site.

B. Description of Hazardous Wastes

Large piles of caustic magnesium salts with some heavy metals have been identified.

C. Threat to Public Health and Environment

The primary route of exposure is through direct contact to humans, and surface run-off to the Bay.

II. Site Status

A. Status of Site Activity

A screening program will be implemented to confirm that foreign materials are not buried in piles. The magnesium, gypsum, and dolomite will be recycled. A removal schedule is pending.

B. Projected Revenue Sources

Leslie Salt is the responsible party and an active business.

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties (RPs). DHS has budgeted \$50,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The RPs will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based upon current information regarding this site and RP cleanup schedules.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Sept. 1987</u> |
| 2. <u>Remedial Action Plan</u> | <u>Dec. 1987</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>March 1988</u> |
| b) Implementation | b) <u>Sept. 1988</u> |
| c) Certification | c) <u>Nov. 1988</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Nov. 1989</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

PACIFIC GAS & ELECTRIC/EMERYVILLE

I. Site Information

A. Location and Type of Site

4525 Hollis Street
Emeryville, CA 94608
Alameda County

This site, which has been in operation since the early 1920's, is Pacific Gas and Electric's (PG&E) Materials Distribution Center. The site has served as a warehouse, repair shop, and storage yard for transformers, capacitors, and other electrical supplies. A tank farm for the storage of fuel and transformer oil is also present on the site. The facility covers approximately two city blocks of an area which is generally industrialized. A residential area is located approximately one-quarter mile from the site.

B. Description of Hazardous Wastes

The soil is contaminated with polychlorinated biphenyls (PCBs) and heavy metals, especially lead which is present at very high concentrations at localized areas. The ground water may also be contaminated by heavy metals originating at the site.

C. Threat to Public Health and Environment

Direct contact with soil may present a threat to public health as a result of exposure to PCBs and heavy metals. Two ground water wells present on the site have been abandoned. There is no known use of the ground water for drinking water supply or for industrial uses. The site is completely fenced.

II. Site Status

A. Status of Site Activity

The Department began investigation of this site in 1983, following a spill from a caustic tank. In October, 1983, EPA fined PG&E \$11,000 for PCB storage violations. In July, 1984, PG&E filed a report of site investigation. Additional investigation reports were submitted in 1985. The Department is awaiting additional site characterization data.

B. Projected Revenue Sources

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$30,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project as allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases and are based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Completed</u> |
| 2. <u>Remedial Action Plan</u> | <u>Completed</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>July 1988</u> |
| b) Implementation | b) <u>Sept. 1988</u> |
| c) Certification | c) <u>Nov. 1988</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Nov. 1989</u> |
| b) Operation and Maintenance | b) <u>10-15 years</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

PACIFIC STATES STEEL

I. Site Information

A. Location and Type of Site

35124 Alvarado-Miles Road
Union City, CA 94587
Alameda County

This site was a steel manufacturing facility from 1935 until 1978. Slag piles and evaporation ponds are on-site.

B. Description of Hazardous Wastes

Heavy metals (cadmium (Cd); chromium (Cr); copper (Cu); nickel (Ni); lead (Pb); zinc (Zn)) have been detected in slag piles and soils. Phenols and cyanides may also be present. Concentrations and/or quantities of wastes are not known.

C. Threat to Public Health and Environment

The primary threat to the public health and environment is surface water runoff from the site. This runoff could impact San Francisco Bay.

II. Site Status

A. Status of Site Activity

A site sampling plan was submitted to the Regional Water Quality Control Board (RWQCB) and DHS. Limited soil sampling is completed. Site characterization needs to be completed.

B. Projected Revenue Sources

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$100,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|---------------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Dec. 1987</u> |
| 2. <u>Remedial Action Plan</u> | <u>Mar. 1988</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>June 1988</u> |
| b) Implementation | b) <u>Dec. 1988</u> |
| c) Certification | c) <u>Feb. 1989</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Feb. 1990</u> |
| b) Operation and Maintenance | b) <u>10-15 years</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

PORT OF OAKLAND, EMBARCADERO COVE

I. Site Information

A. Location and Type of Site

Dennison and Embarcadero Streets
Oakland, CA 94606
Alameda County

The site is located on Embarcadero Street at the foot of Dennison Street in Oakland. For the past 60 to 70 years, the 1.3-acre site was leased to industrial tenants, including oil companies and formulators of pesticides and wood preservatives. It is now being developed into a commercial complex. A public walkway has already been constructed through the site.

B. Description of Hazardous Wastes

Pentachlorophenol (PCP), organochlorine pesticides, solvents and Santophen, another wood preservative have been discovered at this site. Dibenzodioxins and dibenzofurans are associated with PCP. About 8000 cubic yards of soil is contaminated, while an unknown amount of ground water is contaminated. PCP and trace dioxin was found in a shallow well. Organochlorine compounds interfere with the function of regulator proteins, such as hormones and enzymes. This results in interference with the nervous system and reproductive activity. The possibility of the presence of dibenzodioxins and dibenzofurans as an impurity of PCP was investigated. Dioxins and furans were detected in all soil samples tested. Off-site ground water analysis for dioxins and furans is presently under way.

C. Threat to Public Health and Environment

Residential, industrial, commercial, recreational, and military areas are located immediately adjacent to the site. The population within a 3 mile radius is estimated at 215,331 persons. PCP was not detected in shoreline sediment samples, or at the box culvert outlet in the Bay at Dennison Street. The closest domestic well is about 3/4 mile away.

II. Site Status

A. Status of Site Activity

8/17/81: A site investigation by Brown and Caldwell confirmed soil contamination.

4/04/83: Contaminants were identified during the ground water investigation, but the extent of the plume is unknown.

3/01/85: The Port Authority fenced and posted the site in compliance with DHS order.

5/01/85: Additional monitoring wells were installed by ERM-West.

9/01/85: Additional monitoring wells were installed by ERM-West.

8/02/85: Additional ground water investigations were conducted.

12/06/85: The Port Authority submitted soil sampling results which identified dioxin.

B. Projected Revenue Sources

The Port of Oakland (Port) owns the site and has paid for the studies. The feasibility study is presently being prepared, and will be submitted to DHS by December 1, 1986.

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$50,000 for direct costs related to oversight of this agreement. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below are to reflect completion of major site cleanup phases based upon current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|---------------------------------|---------------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Dec. 1986</u> |
| 2. <u>Remedial Action Plan</u> | <u>Jan. 1987</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>April 1987</u> |
| b) Implementation | b) <u>Oct. 1987</u> |
| c) Certification | c) <u>Dec. 1987</u> |

4. Cost Recovery and/or Operation and Maintenance

- a) Cost Recovery
- b) Operation and Maintenance

- a) Dec. 1988
- b) 10-15 years

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

SOUTHERN PACIFIC, OAKLAND

I. Site Information

A. Location and Type of Site

1707 Wood Street
Oakland, CA 94607
Alameda County

Southern Pacific, Oakland is a large rail yard, switching and maintenance facility located between the Outer Harbor and Inner Harbor of San Francisco Bay. The site includes two surface impoundments which are separated by approximately one-half mile distance: an oil/water separator system for wastewaters from the cleaning of rail cars; and an inactive waste pond for washwaters from the interiors of tank cars (referred to as polychlorinated biphenyl (PCB) sludge pond). There is soil and ground water contamination at each of the surface impoundment areas.

B. Description of Hazardous Wastes

This site has been contaminated by toxic chemicals including PCBs, polynuclear aromatics (PNAs), benzene, toluene, xylene, ethylbenzene, waste oils; solvents such as trichloroethylene (TCE) and dichloroethylene (DCE); heavy metals such as lead and arsenic. Shallow ground water is contaminated by solvents and flooding free product is present.

C. Threat to Public Health and Environment

This site is located within 1 mile of the San Francisco Bay and possesses a drainage ditch under the site. Damage to aquatic ecosystems is a potential threat. Solvents are known to have migrated off-site (at least 200 feet from the site at 3 feet depth) and to shallow ground water. Potential beneficial use of the deeper aquifers is under investigation.

The waste impoundment area is fenced; however, direct contact would present a potential health threat.

II. Site Status

A. Status of Site Activity

In February, 1985, Southern Pacific (SP) submitted a site investigation report on the abandoned surface impoundment (PCB sludge pond) to the Regional Water Quality Control Board (RWQCB). SP has started additional site characterization, including ground water monitoring for the PCB sludge pond, and will submit a feasibility study of various remedial action options later this year.

In August, 1986, SP submitted a closure plan for the oil/water separator surface impoundment to the RWQCB. In response to a request by the RWQCB, SP has commenced site investigation, evaluation of remedial action options, and development of a hydrogeologic assessment report required under the Toxic Pits Cleanup Act for this surface impoundment.

B. Projected Revenue Sources

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$70,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project as allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases and are based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Dec. 1991</u> |
| c) Feasibility Study | c) <u>March 1992</u> |
| 2. <u>Remedial Action Plan</u> | <u>Sept. 1992</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>March 1993</u> |
| b) Implementation | b) <u>Dec. 1994</u> |
| c) Certification | c) <u>Feb. 1995</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Feb. 1996</u> |
| b) Operation and Maintenance | b) <u>20+ years</u> |

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

TROJAN POWDER WORKS COMPANY

I. Site Information

A. Location and Type of Site

Intersection of Lewelling and Wicks Blvd.
San Leandro, CA 94579
Alameda County

From about the early 1900's to the early 1960's, some of this 200-a site was used by Trojan Powder to manufacture black powder explosives safety fuses. Potassium or sodium nitrate, charcoal, and sulfur were some of the materials used in the manufacturing at the properties; Citat Homes has proposed a housing development at the site.

B. Description of Hazardous Wastes

The site is contaminated with a tarry material containing polynuclear aromatic hydrocarbons.

C. Threat to Public Health and Environment

The site is readily accessible to the public and is about a half mile from the San Francisco Bay.

II. Site Status

A. Status of Activity

The current site has an identified owner; financial site assessment activities and removal of contaminated soil and debris has been affected.

B. Project Revenue Sources

The designated responsible party (RP) is herewith provided:

Citation Builders
2777 Alameda Street
San Leandro, CA 94577

The DHS will be issuing a remedial action order or entering into enforceable agreement with the responsible parties. DHS has budget \$50,000 for oversight/monitoring of cleanup efforts. DHS will recover 10 of direct costs plus staff costs and overhead related to the project allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Completed</u> |
| 2. <u>Remedial Action Plan</u> | <u>Dec. 1986</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>March 1987</u> |
| b) Implementation | b) <u>Oct. 1987</u> |
| c) Certification | c) <u>Dec. 1987</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Dec. 1988</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

RESPONSIBLE PARTY - LEAD SITE CLEANUP WORKPLAN

U.S. PIPE AND FOUNDRY COMPANY

I. Site Information

A. Location and Type of Site

1295 Whipple Road
Union City, CA 94587
Alameda County

U.S. Pipe and Foundry Company is an active iron smelting facility which has operated on the site since 1951. Slag, baghouse dust, and oil/paint waste have been deposited in waste piles and landfills on-site. Rusted drums and other solid debris have also been deposited in these waste piles.

B. Description of Hazardous Wastes

The landfill accepted the following hazardous or potentially hazardous wastes: 1) slag, 2) oil and paint waste, and 3) sand and baghouse waste. Oil and paint waste reportedly constituted less than 5% of the total waste volume.

A sample of baghouse dust taken in 1985 revealed Total Threshold Limit Concentration (TTLIC) levels were exceeded for cadmium, lead, and zinc. The Soluble Threshold Limit Concentration (STLIC) level was exceeded for zinc. Baghouse dust production was estimated at 7 cubic yards/day or 2 tons/day since 1961.

C. Threat to Public Health and Environment

There is suspected soil contamination beneath the landfills and wastepiles. The site is fenced, preventing public access. However, up to 200 employees work at this location.

II. Site Status

A. Status of Site Activity

12/04/80: Analyses of samples of core sand, cupola slag, and carbide slag from the slag heap, collected 8/21/80, showed that the waste generated was not hazardous. Baghouse dust characterization was to be conducted by U.S. Pipe and Foundry Company.

03/84: The abandoned site assessment program prepared a preliminary assessment.

03/12/84: The U.S. Pipe and Foundry Company sent DHS a sample of baghouse dust that represented the percentage of the metals found in the waste.

06/24/85: Chief Perry, Union City Fire Department, requested a DHS investigation of the site following a fire.

07/16/85: Chemical analysis of baghouse dust received by DHS from U.S. Pipe and Foundry showed elevated levels of cadmium and lead.

07/31/85: A meeting with Regional Water Quality Control Board (RWQCB), DHS, and U.S. Pipe and Foundry was convened to discuss the current situation and future actions. The conclusions reached were: newly generated baghouse dust is to be properly disposed of at an approved landfill; dust control measures will be implemented at the landfill site immediately; the site will be properly posted as a hazardous waste site; the California Assessment Manual Waste Extraction Test (WET) and EP Toxicity tests will be conducted on the baghouse waste; the firm will develop treatment methods for its baghouse dust and will apply for a permit/variance from permit requirements.

01/27/86: Analyses received from U.S. Pipe and Foundry on baghouse dust, indicating that the TTLIC limits were exceeded for cadmium, lead and zinc and the STLIC limit was exceeded for zinc.

09/04/86: RWQCB requested U.S. Pipe and Foundry to submit a Report of Waste Discharge for the landfill and the surface impoundment.

Projected Revenue Sources

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$50,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project as allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

III. Project Completion Estimates

e estimates shown below reflect completion of major site cleanup phases and e based on current information regarding this site and RP cleanup plans and mpleted actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|------------------------------|-----------------------------------|
| <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) Completed |
| b) Remedial Investigation | b) March 1990 |
| c) Feasibility Study | c) Nov. 1990 |

2. Remedial Action Plan

Feb. 1991

3. Remedial Action

- a) Design
- b) Implementation
- c) Certification

a) May 1991
b) Nov. 1991
c) Jan. 1992

4. Cost Recovery and/or Operation and Maintenance

- a) Cost Recovery
- b) Operation and Maintenance

a) Jan. 1993
b) N/A

RESPONSIBLE PARTY-LEAD SITE CLEANUP WORKPLAN

WESTERN FORGE AND FLANGE*

I. Site Information

A. Location and Type of Site

536 Cleveland Avenue
Albany, CA 94710
Alameda County

This site is a metal foundry which has heavy metal contamination of on-site soils.

B. Description of Hazardous Wastes

Approximately 450 cubic yards of soil are present which are contaminated with heavy metals and oil.

C. Threat to Public Health and Environment

The primary threat to the public health and environment is exposure through surface runoff and direct contact.

II. Site Status

A. Status of Activity

Active enforcement of site mitigative requirements has been implemented.

B. Project Revenue Sources

Western Forge and Flange is considered to be the responsible party (RP).

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$30,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project as allowed by state law. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

*The Western Forge and Flange site was mitigated in June of 1987.

WESTINGHOUSE ELECTRIC COMPANY, EMERYVILLE

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RC cleanup plans and completed actions.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|---------------------------------------|
| <u>1. Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Sept. 1987</u> |
| c) Feasibility Study | c) <u>Jan. 1988</u> |
| <u>2. Remedial Action Plan</u> | <u>April 1988</u> |
| <u>3. Remedial Action</u> | |
| a) Design | a) <u>June 1988</u> |
| b) Implementation | b) <u>Aug. 1988</u> |
| c) Certification | c) <u>Oct. 1988</u> |
| <u>4. Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Oct. 1989</u> |
| b) Operation and Maintenance | b) <u>N/A</u> |

I. Site InformationA. Location and Type of Site

5899 Peladeau Street
Emeryville, CA 94608
Alameda County

This facility includes the building that occupies virtually all of the land north of Powell Street between Peladeau and Landregan Streets, except for a 1/2 acre parking area north of the building. This facility also includes contiguous 2-acre undeveloped and vacant areas lying directly west of the building. It is this 2-acre site which was addressed in site mitigation and is hereinafter referred to as the "Site".

Operations at this facility included (apparently sometime prior to 1976) maintenance and repair of electrical apparatus including transformers containing polychlorinated biphenyl (PCB) fluids. In the course of maintenance, some of these liquids leaked on, or were discharged to the site. An initial oily surface soil sampling in early 1981 showed a PCB concentration of 130,000 parts per million (ppm), calculated as Arochlor 1260. More extensive surface soil samplings showed PCB concentrations ranging from 560 to 44,000 ppm. Site characterization showed subsurface PCB contamination, a sample was taken at 27 to 27.5 feet having 170 ppm PCBs. Ground water, found at about 19 feet, showed significant concentrations of PCBs in a few of the wells that were installed for monitoring.

B. Description of Hazardous Wastes

The principle contaminant on the site is PCB, along with tri- and tetra-chlorinated benzenes which are commonly used as diluent for PCB fluids in transformers. PCBs have low acute toxicity, but are of public health concern because of their persistence in the environment, their bioaccumulation in animal tissues, and their potential for chronic toxicity. The chlorinated benzenes are not known to be bioaccumulative, but they have significant acute oral toxicity.

C. Threat to Public Health and Environment

The concerns for human health are primarily those of occupational exposure to PCBs, but there is the potential for harm through ingestion of PCB contaminated foods, especially sea foods, which might be contaminated with PCBs through bioaccumulation.

The Westinghouse site is in an industrial area and subsequent to the findings of PCB contamination, was fenced to preclude casual human trespass. A mainline fenced railroad right-of-way also secures the site from trespassing. Migration from the site would be possible through

surface water runoff or via the shallow ground water leading to the nearby San Francisco Bay, however, this potential is considered to be very low.

FACTOR AVENUE PLUME (#1465), SAN LEANDRO

II. Site Status

I. Site Information

A. Status of Site Activity

The EPA assumed the lead responsibility in April 1981 for the characterization of the site and the development and implementation of a remedial action for the site with advisory roles by the Department of Health Services and the Regional Water Quality Control Board. The latter agency issued a Cleanup and Abatement Order, No. 85-006, dated Jan. 21, 1985, pertaining to the prevention of soil movement from the site by surface water runoff control.

B. Projected Revenue Source

The DHS will be issuing a remedial action order or entering into an enforceable agreement with the responsible parties. DHS has budgeted \$50,000 for oversight/monitoring of cleanup efforts. DHS will recover 100% of direct costs plus staff costs and overhead related to the project. The responsible parties will pay all costs associated with remedial investigations and cleanup activities.

A. Location and Type of Site

1465 Factor Avenue
San Leandro, CA 94577
Alameda County

Four wells were installed for baseline water quality sampling by the new owners of the property. Significant concentrations of industrial solvents and chemicals were identified in the ground water under the site. No contaminants were found in soil borings at the four well sites. The source appears likely to be off-site and has not yet been identified.

B. Description of Hazardous Wastes

Groundwater: trichloroethylene (TCE) up to 2215 parts per billion (ppb); trichloroethane (TCA) up to 321 ppb; perchloroethylene (PCE) up to 263 ppb; 1,1-dichloroethane (DCA) up to 524 ppb; trans-1,2-dichloroethylene up to 2.110 ppb; benzene up to 71.9 ppb; arsenic 0.082 milligrams per liter (mg/L); chromium 0.52 mg/L; lead 0.064 mg/L; cyanide 0.12 mg/L.

C. Threat to Public Health and Environment

Numerous private wells are within a 3-mile radius and may become contaminated.

III. Project Completion Estimates

The estimates shown below reflect completion of major site cleanup phases based on current information regarding this site and RP cleanup plans.

II. Site Status

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|-----------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Completed</u> |
| c) Feasibility Study | c) <u>Completed</u> |
| 2. <u>Remedial Action Plan</u> | <u>Dec. 1986</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>March 1987</u> |
| b) Implementation | b) <u>Oct. 1987</u> |
| c) Certification | c) <u>Dec. 1987</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Dec. 1988</u> |
| b) Operation and Maintenance | b) <u>10-15 years</u> |

A. Status of Site Activity

- Nov. 13, 1985: Safety specialists notified Regional Water Quality Control Board (RWQCB) of chemical contamination of the ground water they had sampled from wells at the site for Lincoln Property Company.
- Oct. 9, 1985: DHS notified Lincoln Property Company that Factor Avenue was being evaluated for inclusion on the State Priority Ranking List.
- Nov. 29, 1985: Beta associates informed DHS that they had been retained by Lincoln Property Company to continue to investigate the groundwater contamination at the site.
- Mar. 17, 1986: Beta Associates presented the results from resampling the four wells at the site: contamination had increased.

DETAILED SITE EXPENDITURE PLAN

ONE HUNDRED THIRTY NINTH STREET (#750), SAN LEANDRO

Mar. 21, 1986: DHS informed Lincoln Property Company that, until further notice, they had no further obligation to continue the groundwater investigation at the site.

B. Projected Revenue Sources

No responsible party (RP) has been identified. Lincoln Property Company owns the site. Potential RP's off-site are Simmons Mattress Company and PacTel Information Systems.

III. Project Budget and Cash Flow Estimates

The cost estimates shown below reflect only the state costs of site cleanup. All activities will be funded from bond sale proceeds (to the extent that federal Superfund or responsible party funding is not available) except for the preparation of remedial action plans.

| <u>Task Group</u> | <u>Projected State Costs</u> | <u>Estimated Completion Dates</u> |
|--|------------------------------|-----------------------------------|
| <u>1. Site Characterization</u> | <u>\$ 715,000</u> | |
| a) Preliminary Assessment | | a) <u>Dec. 1986</u> |
| b) Remedial Investigation | | b) <u>Nov. 1987</u> |
| c) Feasibility Study | | c) <u>Aug. 1988</u> |
| <u>2. Remedial Action Plan</u> | <u>\$ 60,000</u> | <u>Nov. 1988</u> |
| <u>3. Remedial Action</u> | <u>\$ 2,860,000</u> | |
| a) Design | | a) <u>April 1989</u> |
| b) Implementation | | b) <u>April 1990</u> |
| c) Certification | | c) <u>June 1990</u> |
| <u>4. Cost Recovery and/or Operation and Maintenance</u> | | |
| a) Cost Recovery | | a) <u>June 1991</u> |
| b) Operation and Maintenance | | b) <u>10-15 years</u> |
| <u>TOTAL PROJECT COSTS</u> | <u>\$ 3,635,000</u> | |

I. Site Information

A. Location and Type of Site

750-139th Street
San Leandro, CA 94578
Alameda County

Five monitoring wells were installed at the site and significant concentrations of trichloroethylene (TCE) and tetrachloroethylene (PCE) have been identified.

B. Description of Hazardous Wastes

Trichloroethylene (TCE) was identified at a maximum of 64.2 parts per billion (ppb) and tetrachloroethylene (PCE) at a maximum of 934 ppb. Both are suspected human carcinogens.

C. Threat to Public Health and Environment

The contaminants are in a shallow aquifer at a depth of approximately 20 feet. Wells may become contaminated. There are no surface water bodies in the vicinity. The entire area is covered with buildings and pavement. A railroad spur, adjacent to the site, provides access for surface runoff to the shallow aquifer.

II. Site Status

A. Status of Site Activity

- 04/10/85: Beta Associates completed soil/ground water investigation for the prospective buyer of 750 - 139th Street property.
- 05/03/85: The site owners notified San Francisco Bay Regional Water Quality Control Board (RWQCB) of contaminants found in the ground water at the 750 - 139th Street site.
- 08/07/85: The RWQCB referred the 139th Street case to the Department of Health Services (DHS).
- 10/28/85: Lincoln Property Company purchased the 139th Street site.
- 12/18/85: The 139th Street Ranking Package is completed.

02/13/86: Beta Associates completed ground water sampling of off-site monitoring wells. TCE was detected at 8.8 ppb and PCE was detected at 78.4 ppb.

DHS is now drafting a Task Order for a Preliminary Site Assessment.

B. Projected Revenue Sources

No responsible party has been identified yet.

It will be necessary to utilize bond funds to remediate this site. The Department will undertake appropriate cost recovery actions.

This site has not been identified as a National Priorities List (NPL) site, nor does it appear to be a likely NPL candidate in the future. Consequently, federal funds appear as an unlikely source of revenue for this site.

III. Project Budget and Cash Flow Estimates

The cost estimates shown below reflect only the state costs of site cleanup. All activities will be funded from bond sale proceeds (to the extent that federal Superfund or responsible party funding is not available).

| <u>Task Group</u> | <u>Projected State Costs</u> | <u>Estimated Completion Dates</u> |
|--|------------------------------|-----------------------------------|
| 1. <u>Site Characterization</u> | \$ 560,000 | |
| a) Preliminary Assessment | | a) Sept. 1986 |
| b) Remedial Investigation | | b) Aug. 1987 |
| b) Feasibility Study | | c) June 1988 |
| 2. <u>Remedial Action Plan</u> | \$ 60,000 | Sept. 1988 |
| 3. <u>Remedial Action</u> | \$ 1,660,000 | |
| a) Design | | a) Feb. 1989 |
| b) Implementation | | b) Feb. 1990 |
| c) Certification | | c) April 1990 |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | | |
| a) Cost Recovery | | a) April 1991 |
| b) Operation and Maintenance | | b) 10-15 years |
| <u>TOTAL PROJECT COSTS</u> | \$ 2,280,000 | |

DETAILED SITE EXPENDITURE PLAN

AERO QUALITY PLATING

I. Site Information

A. Location and Type of Site

710 73rd Avenue
Oakland, CA 94621
Alameda County

The shop did electroplating in baths using copper, chromium, lead, nickel, and zinc salts.

B. Description of Hazardous Wastes

Wastes generated include heavy metals and cyanide. Drums stored on-site were open, leaking, and corroded. Cyanide solutions are stored on-site in open tanks. Sumps are full of toxic sludge. There is a lot of spillage in the shop.

C. Threat to Public Health and Environment

There is suspected soil contamination and possible ground water contamination. There is a potential for migration of contamination via surface water runoff to adjacent businesses. A nearby sanitary sewer showed contamination until the water service was disconnected.

II. Site Status

A. Status of Site Activity

Operations at the site were discontinued in December, 1985.

B. Projected Revenue Sources

It appears, at this time, that bond funds will have to be expended for the remediation of this site. If bond funds are expended, appropriate cost recovery actions will be taken. Potential responsible parties have been notified about State requirements for site cleanup, however, they have not committed to any cleanup.

This site has not been identified as a National Priorities List (NPL) site, nor does it appear to be a likely NPL candidate in the future. Therefore, it appears unlikely that federal funds are a viable source of revenue for this site.

III. Project Budget and Cash Flow Estimates

The cost estimates shown below reflect only the state costs of site cleanup. All activities will be funded from bond sale proceeds to the extent that federal Superfund or responsible party funding is not available.

| <u>Task Group</u> | <u>Projected State Costs</u> | <u>Estimated Completion Dates</u> |
|--|----------------------------------|---------------------------------------|
| 1. <u>Site Characterization</u> | \$ 80,000 | |
| a) Preliminary Assessment | | a) <u>July 1987</u> |
| b) Remedial Investigation | | b) <u>Jan. 1988</u> |
| c) Feasibility Study | | c) <u>June 1988</u> |
| 2. <u>Remedial Action Plan</u> | \$ 30,000 | Sept. 1988 |
| 3. <u>Remedial Action</u> | \$ 240,000 | |
| a) Design | | a) <u>Nov. 1988</u> |
| b) Implementation | | b) <u>Feb. 1989</u> |
| c) Certification | | c) <u>April 1989</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | | |
| a) Cost Recovery | | a) <u>April 1990</u> |
| b) Operation and Maintenance | | b) <u>N/A</u> |
| <u>TOTAL PROJECT COSTS</u> | \$ 350,000 | |

L&M PLATING

I. Site Information

A. Location and Type of Site

920 54th Avenue
Oakland, CA 94608
Alameda County

L&M plated metals with zinc, chrome, and nickel finish from 1977 until 1983, when an extensive fire occurred. Currently, hazardous substances are stored on-site in open drums and plating baths. Soil in the yard of a residence at 930 54th Avenue is contaminated with cyanide and heavy metals.

B. Description of Hazardous Wastes

Elevated levels of cyanide, zinc, chromium, cadmium, nickel, lead, and antimony have been detected on ground surfaces and in the soil. Field tests indicate a pH range of 0-12 in open drums and tanks stored on-site. Some of these containers are suspected of holding extremely high levels of cyanide and metals.

C. Threat to Public Health and Environment

The site is not completely fenced and there are residents on-site, as well as numerous residents nearby. There is a possibility of direct contact with containers of waste and with contaminated ground surfaces and soil. There may be surface runoff of contaminants, as well as airborne migration of contaminated soil and dust.

II. Site Status

A. Status of Site Activity

09/02/83: Department complaint inspection was conducted.

01/04/84: Alameda County District Attorney hearing with Robert McSkimming for non-compliance with a Notice of Violation issued after the September inspection.

04/26/85: Department compliance and sampling inspection occurred.

04/29/85: Department compliance and sampling inspection occurred.

03/20/86: Department sampling inspections were conducted.

04/08/86: Department sampling inspections were conducted.

03/28/86: The Department issued a Fence and Post Order.

08/22/86: The Alameda County District Attorney filed a civil complaint for violations of the Hazardous Waste Control Act.

A Remedial Action Order was issued to the responsible parties (RPs). The RPs failed to comply with the Order; therefore, bond funds are currently being utilized by the Department to initiate removal and remedial investigation work. The Oakland Housing Conservation Division has issued eviction notices to residents of 920 and 930 - 54th Avenue.

B. Projected Revenue Sources

Identified RPs include: The former L&M Plating owner and operator and owner of 930 54th Avenue; and the current owner of 920 54th Avenue.

Failure by the RPs to respond in a timely manner to the Department's order has necessitated expenditure of bond funds. The Department will take appropriate cost recovery actions.

III. Project Budget and Cash Flow Estimates

The cost estimates shown below reflect the state costs of site cleanup. All activities will be funded from bond sale proceeds to the extent that federal Superfund or RPs funding is not available.

| <u>Task Group</u> | <u>Projected State Costs</u> | <u>Estimated Completion Dates</u> |
|--|------------------------------|-----------------------------------|
| 1. <u>Site Characterization</u> | <u>\$ 150,000</u> | |
| a) Preliminary Assessment | | a) <u>Sept. 1986</u> |
| b) Remedial Investigation | | b) <u>June 1987</u> |
| c) Feasibility Study | | c) <u>Nov. 1987</u> |
| 2. <u>Remedial Action Plan</u> | <u>\$ 30,000</u> | <u>Feb. 1988</u> |
| 3. <u>Remedial Action</u> | <u>\$ 445,000</u> | |
| a) Design | | a) <u>May 1988</u> |
| b) Implementation | | b) <u>Aug. 1988</u> |
| c) Certification | | c) <u>Oct. 1988</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | | |
| a) Cost Recovery | | a) <u>Oct. 1989</u> |
| b) Operation and Maintenance | | b) <u>N/A</u> |
| <u>TOTAL PROJECT COSTS</u> | <u>\$ 625,000</u> | |

FEDERAL FACILITY SITE CLEANUP WORKPLAN

ALAMEDA NAVAL AIR STATION

I. Site Information

A. Location and Type of Site

Alameda, CA 94501
Alameda County

Two industrial hazardous waste disposal sites were utilized from 1943 thru the late 1970's. The disposal sites were located in baylands adjacent to San Francisco Bay and were approximately 110 acres each in size. The site received waste oil, solvents, paints, scrap metal, garbage, radiological material, aircraft engines, and possibly explosives.

In addition, aviation fuel tanks have been identified. It is estimated that 365,000 gallons of fuel has leaked from these tanks.

Numerous plating and painting shops are being investigated to determine possible contamination from spillage and other disposal practices.

B. Description of Hazardous Wastes

As identified above, hazardous waste suspected to be found include waste oil, solvents, heavy metals, explosives, and radiological material. Initial investigations have found only low levels of contaminants in soil and ground water.

C. Threat to Public Health and Environment

The primary concern is San Francisco Bay which is directly adjacent to the former hazardous waste disposal landfill.

II. Site Status

A. Status of Site Activity

1983: The engineering consultant completed an historical literature review to identify possible sources of contamination.

May 1984: The initial soil and ground water investigation completed.

April 1985: A subsequent investigation workplan was submitted to DHS and Regional Water Quality Control Board (RWQCB).

B. Projected Revenue Sources

This site is owned and operated by the U.S. Government. The Department will seek funding from EPA for staff costs associated with DHS oversight activities.

III. Project Completion Estimates

The Department has budgeted \$100,000 from the Hazardous Substance Account to provide for private consultant assistance to DHS oversight staff. DHS will seek cost-recovery from the U.S. Government.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|---|---------------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>Oct. 1988</u> |
| c) Feasibility Study | c) <u>Jan. 1990</u> |
| 2. <u>Remedial Action Plan (ROD)</u> | <u>July 1990</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Jan. 1991</u> |
| b) Implementation | b) <u>July 1992</u> |
| c) Certification | c) <u>Sept. 1992</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>Sept. 1993</u> |
| b) Operation and Maintenance | b) <u>20+ years</u> |

FEDERAL FACILITY SITE CLEANUP WORKPLAN

LAWRENCE LIVERMORE NATIONAL LABORATORY

I. Site Information

A. Location and Type of Site

Lawrence Livermore National Laboratory
University of California
Livermore, CA 94550
Alameda County

B. Description of Hazardous Wastes

Several problems on the 1 square mile (mi²) site include: a ground water plume extending west offsite includes the chemical trichloroethylene (TCE); dichloroethylene (DCE); and perchloroethylene (PCE); a gasoline spill in the southeast corner extends offsite slightly to the southeast; polychlorinated biphenyl (PCB) transformers were found in an old landfill; TCE was found in soil borings in the southeast section.

C. Threat to Public Health and Environment

Private wells were found to be contaminated by the west-trending plume; families were subsequently supplied with municipal water. Ground water is threatened by gasoline plume, and soils are contaminated.

II. Site Status

A. Status of Site Activity

September 11, 1984: An Order of Compliance was issued by the Department, directing Lawrence Livermore to provide water to residents with contaminated wells, and requiring investigations in specific areas.

November 1985: Waste discharge requirements were issued to Lawrence Livermore by the Oakland Water Quality Control Board.

January 1986: Decontamination and waste treatment facility exploratory trenches were approved for lack of evidence of Holocene faulting.

January 31, 1986: A final report was submitted regarding cleanup of East Traffic Circle landfill (PCB transformers).

B. Projected Revenue Sources

The Responsible Party is Lawrence Livermore and the U.S. Department of Energy. Cleanup costs will be borne by Lawrence Livermore. Accordingly, no bond funds are anticipated to be spent on this site. The Department will seek funding from EPA for staff costs associated with DHS oversight activities.

III. Project Completion Estimates

The Department has budgeted \$100,000 from the Hazardous Substance Account to provide the private consultant assistance to DHS oversight staff. DHS will seek cost-recovery from the U.S. Government.

| <u>Task Group</u> | <u>Estimated Completion Dates</u> |
|--|---------------------------------------|
| 1. <u>Site Characterization</u> | |
| a) Preliminary Assessment | a) <u>Completed</u> |
| b) Remedial Investigation | b) <u>July 1988</u> |
| c) Feasibility Study | c) <u>Oct. 1989</u> |
| 2. <u>Remedial Action Plan</u> | <u>April 1990</u> |
| 3. <u>Remedial Action</u> | |
| a) Design | a) <u>Oct. 1990</u> |
| b) Implementation | b) <u>April 1992</u> |
| c) Certification | c) <u>June 1992</u> |
| 4. <u>Cost Recovery and/or Operation and Maintenance</u> | |
| a) Cost Recovery | a) <u>June 1993</u> |
| b) Operation and Maintenance | b) <u>20+ years</u> |