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# California Environmental Protection Agency:

Insufficient Data Exists on the Number of Abandoned, Idled, or Underused Contaminated Properties, and Liability Concerns and Funding Constraints Can Impede Their Cleanup and Redevelopment



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# **CALIFORNIA STATE AUDITOR**

ELAINE M. HOWLE STATE AUDITOR

### STEVEN M. HENDRICKSON CHIEF DEPUTY STATE AUDITOR

July 22, 2003

2002-121

The Governor of California President pro Tempore of the Senate Speaker of the Assembly State Capitol Sacramento, California 95814

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee (audit committee), the Bureau of State Audits presents its audit report concerning the California Environmental Protection Agency (Cal/EPA) and its entities involved in the cleanup of properties contaminated by hazardous materials and waste, the Department of Toxic Substances Control (Toxics) and the State Water Resources Control Board (State Water Board). The audit committee requested that we provide information on how many orphan sites and sites with orphan shares exist in the State, as well as how much funding is needed and how much is directly available to clean up those sites.

This report concludes that insufficient data exists to determine the number of orphan sites and sites with orphan shares, and that liability concerns and funding constraints can impede their cleanup and redevelopment. Specifically, state law does not require Toxics and the State Water Board to maintain a database to capture this information. However, Toxics' database that tracks contaminated properties currently reports 46 orphan sites and, as of January 1, 2003, its program that addresses properties with orphan shares has three sites eligible to receive orphan share compensation. Due to insufficient data in the State Water Board's database that tracks contaminated sites, we were unable to identify the number of orphan sites under its jurisdiction. However, the State Water Board's unaudited data indicate that it has only seven orphan sites to which it has committed a total of \$1.4 million in state resources. Further, the State Water Board does not have orphan shares because even though some share of the cleanup costs is not attributable to a responsible party, each party must assume full responsibility for those costs.

Although Toxics' primary funding source for cleanup, an environmental fee levied on corporations, has remained relatively stable, the State has recently reduced the amount of General Fund appropriations made available to cover cleanup costs. For example, the Cleanup Loans and Environmental Assistance to Neighborhoods Account received \$85 million in General Fund appropriations during fiscal year 2000–01, but \$77 million was transferred back to the General Fund in the subsequent fiscal year. However, Toxics anticipates that it needs between \$124 million and \$146 million for the long-term remediation of existing orphan sites and \$2.4 million in orphan share compensation during fiscal year 2003–04.

Respectfully submitted,

ne M. Howle

ELAINE M. HOWLE State Auditor

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# **SUMMARY**

### Audit Highlights . . .

Our review of the entities under the California Environmental Protection Agency (Cal/EPA) that oversee the cleanup of contaminated sites, the Department of Toxic Substances Control (Toxics) and the State Water Resources Control Board (State Water Board), found the following:

- ☑ State law does not require Toxics or the State Water Board to capture information on brownfields, such as the number of sites and their potential reuses.
- ✓ Toxics anticipates needing between \$124 million and \$146 million for the remediation of 45 existing orphan sites and \$2.4 million in fiscal year 2003–04 for orphan shares.
- ✓ The State Water Board's unaudited data indicate that it has seven orphan sites to which it has committed \$1.4 million in state resources for cleanup.
- ✓ The reuse of brownfields faces challenges, such as the liability provisions the federal Superfund law imposes and limited funding opportunities.
- ✓ Toxics and the State Water Board have yet to apply for certain federal grants available to assist with the State's assessment and cleanup costs for certain sites, such as mine-scarred lands.

### **RESULTS IN BRIEF**

he Comprehensive Environmental Response, Compensation, and Liability Act, commonly referred to as the federal Superfund law, defines brownfields as real property where the presence or potential presence of a hazardous substance, pollutant, or contaminant may complicate its expansion, redevelopment, or reuse. This audit report discusses various issues relating to the cleanup and reuse of brownfield properties, including the liability provisions imposed under federal law. California does not have a uniform definition for brownfields. Further, state law does not require the entities under the California Environmental Protection Agency (Cal/EPA) that oversee the cleanup of sites with hazardous materials and waste contamination<sup>1</sup>, the Department of Toxic Substances Control (Toxics) and the State Water Resources Control Board (State Water Board), to maintain a database to capture information on brownfields, such as the number of sites and their potential for reuse. Consequently, we are unable to report how many brownfield sites exist in California.

This audit report also discusses the number of orphan sites and sites with orphan shares that exist in California. As of March 20, 2003, Toxics' Calsites database showed 46 orphan sites in California. An orphan site is generally defined as a property where the responsible party has either not been identified, cannot be located, or is unwilling or unable to fund cleanup. Also, as of January 1, 2003, Toxics' program that addresses orphan shares, the Expedited Remedial Action Program (expedited program), has three sites that are eligible to receive compensation. Orphan shares are those portions of a contaminated site with cleanup costs that are attributable to

<sup>&</sup>lt;sup>1</sup> California Health and Safety Code, Section 25501(o) defines hazardous materials as any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. The California Superfund law defines hazardous waste as a waste, or combination of wastes, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible, illness; or poses a substantial present or potential hazard to human health or environment due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence, when improperly treated, stored, transported, or disposed of, or otherwise managed.

an insolvent or defunct party. Due to incomplete data relating to responsible parties in the State Water Board's Geotracker database, we were unable to identify the number of orphan sites under its jurisdiction. However, the State Water Board's unaudited data indicate that it has only seven orphan sites to which it has budgeted \$1.4 million in state resources for cleanup. Additionally, the State Water Board told us that orphan shares do not exist since the nine regional water quality control boards (regional water boards) apportion liability for cleanup using a strict application of joint and several liability. Under this application there are no orphan shares because even though some share of the cleanup costs is not attributable to a responsible party, each must assume full responsibility for those costs.

Between July 1, 1998, and April 30, 2003, Toxics spent \$9.7 million, less amounts recovered from responsible parties, on the cleanup of orphan sites. It anticipates needing an additional \$124 million to \$146 million to cover future costs associated with remediating sites it currently identifies as orphans. However, it is important to note that these future costs can vary since a site's orphan status can change over time as Toxics obtains additional information about the site and seeks out those who are liable for cleanup. Between fiscal years 1998–99 and 2001–02 the expedited program has paid out \$1.2 million in orphan share compensation, and Toxics anticipates it will pay an additional \$2.4 million in fiscal year 2003-04. Toxics receives the majority of its funding for cleanup from an environmental fee the State levies annually on corporations that use, store, or conduct activities relating to hazardous materials. Toxics has also received appropriations from the State's General Fund (General Fund) to cover cleanup costs; however, recently the State has significantly reduced the amount of General Fund appropriations made available. For example, the Cleanup Loans and Environmental Assistance to Neighborhoods Account received \$85 million in General Fund appropriations during fiscal year 2000–01, but \$77 million was transferred back to the General Fund in the subsequent fiscal year.

The redevelopment of brownfields faces challenges at both the State and national level. Specifically, the liability provisions imposed by the federal Superfund law on responsible parties may inhibit their cleanup or reuse. The courts have interpreted liability under the federal law as holding responsible parties strictly accountable for cleanup costs and being subject to joint and several liability; therefore, liability does not require proof of negligence and parties can pay the cleanup costs attributable to others. The courts have also interpreted liability as retroactive, so responsible parties can be held liable for cleanup costs even for activities that took place before the effective date of the law. State Superfund law differs from the federal law in that it is not retroactive and does not impose joint and several liability on responsible parties. However, state law allows Toxics and the Office of the Attorney General to pursue cost recovery actions under the federal Superfund law.

A recent change in federal law is designed to significantly affect liability issues. Specifically, the federal Small Business Liability Relief and Brownfields Revitalization Act (revitalization act) enacted on January 11, 2002, exempts certain contiguous property owners and prospective purchasers from liability under the federal Superfund law. Existing state laws also affect liability issues. For example, California's Land Environmental Restoration and Reuse Act of 2001 provides immunity to local agencies, property purchasers, developers, and financiers from liability for the satisfactory completion of releases identified in an investigation and remedial action plan certified by Toxics or a regional water board. Cal/EPA believes that the degree to which federal Superfund law liability is an impediment to the redevelopment of brownfields may have more to do with the prior experiences of the parties involved in such real estate transactions than with liability issues.

Limited opportunities exist for funding the cleanup of brownfields. Cal/EPA agrees that the state Superfund program does not have the fiscal resources to clean up and prepare all sites with contamination for development. Toxics considers its Voluntary Cleanup Program (voluntary program) and expedited program key drivers for addressing brownfields. However, the voluntary program requires a project proponent who will commit to pay all cleanup costs. The expedited program also requires at least one responsible party who is willing to pay all costs associated with responding to the contamination not paid by the State for orphan shares or another responsible party. The State Water Board's Spills, Leaks, Investigations, and Cleanup Program is set up to recover from responsible parties the reasonable expenses that it and the regional water boards incur in overseeing cleanup, but the program itself provides no funding for cleanup. The State Water Board's only program that provides financial assistance to orphan sites is its Underground Storage Tank Program.

The federal revitalization act authorizes funding for grants and loans relating to brownfield assessments and cleanup, establishing or enhancing state response programs, and establishing a program for states and other eligible participants to provide training, research, and technical assistance to individuals and organizations that desire to implement the act's provisions. On May 30, 2003, Toxics submitted its application to the United States Environmental Protection Agency (U.S. EPA) to receive a state response program grant. Toxics plans to use a portion of the grant to work with the State Water Board and regional water boards to maintain and display accurate geographical information on brownfield sites and other properties that pose environmental concerns. However, Toxics and the State Water Board have yet to apply for additional revitalization act grant funds available to assist with the State's assessment and cleanup costs for certain sites, such as mine-scarred lands.

### RECOMMENDATIONS

If Toxics does not receive funding from the U.S. EPA, Cal/EPA should seek guidance from the Legislature to determine if it desires a database to track the State's efforts to promote the reuse of properties with contamination. If the Legislature approves the development or upgrade of a statewide database that includes relevant data to identify brownfield sites and their planned and actual uses, Cal/EPA should establish a uniform brownfield definition to ensure consistency.

To obtain a comprehensive listing of the number of orphan sites and sites with orphan shares, the Legislature should consider requiring Cal/EPA and its entities to capture the necessary data in their existing or new databases.

To reduce the State's brownfield assessment and cleanup costs, Cal/EPA should ensure that Toxics and the State Water Board apply for all available funding under the revitalization act.

### AGENCY COMMENTS

Cal/EPA and its entities, Toxics and the State Water Board, provide comments on some of the information our report contains, but did not specifically address their plans for implementing our recommendations. Their comments and our response begin on page 39. ■

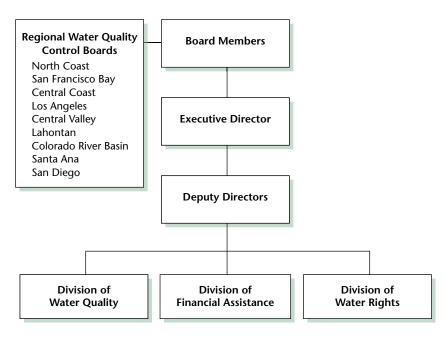
# INTRODUCTION

### BACKGROUND

The Legislature created the California Environmental Protection Agency (Cal/EPA) in 1991 primarily to address those activities, processes, and substances presenting the greatest risk to public health and the environment. Cal/EPA consists of six subdivisions, with the Department of Toxic Substances Control (Toxics) and the State Water Resources Control Board (State Water Board) being responsible for the remediation of contaminated sites throughout the state. Toxics has four regional offices and operates the Site Mitigation and Brownfields Reuse Program, which oversees, or in some instances performs, cleanup activities at sites with hazardous substance contamination and implements California's Superfund program. The Carpenter-Presley-Tanner Hazardous Substance Account Act, among other things, establishes the state Superfund program to provide response authority for releases of hazardous substances; to compensate persons, under certain circumstances, for out-of-pocket medical expenses and lost wages or business income resulting from injuries caused by exposure to releases of hazardous substances; and to make adequate funds available for the State to pay its share of cleanup costs under federal Superfund law. In general, state Superfund sites, commonly referred to as annual work plan sites, pose the greatest threat to the public and environment.

The State Water Board consists of five members that the governor appoints and the Senate confirms, who formulate and adopt state policy for water quality control. Its mission is to ensure the highest reasonable quality water and divide the water to achieve a balance of beneficial uses. The State Water Board uses its divisions of Water Quality, Water Rights, and Financial Assistance to carry out its mission. The Division of Water Quality works to protect California water by identifying and prioritizing water resource problems on the basis of water quality within the State's individual watersheds. The Division of Water Rights issues permits for water rights specifying the amounts, conditions, and construction timetables for the diversion and storage of water. The Division of Financial Assistance provides loans and grants to help local agencies and individuals prevent or clean up pollution of the State's water. Figure 1 on the following page presents an overview of the State Water Board and these three divisions.

### FIGURE 1



### Abbreviated Organizational Chart for the State Water Resources Control Board

Source: State Water Resources Control Board.

Its Spills, Leaks, Investigations, and Cleanup (SLIC) Program and Underground Storage Tank (UST) Program address hazardous waste sites. The SLIC Program is housed in the Division of Financial Assistance while components of the UST Program are housed in both the Division of Financial Assistance and the Division of Water Quality. The State Water Board oversees nine regional water quality control boards (regional water boards). The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) requires the regional water boards to prevent and abate water pollution or nuisances, report to the State Water Board any case of suspected contamination, and recommend to it projects they consider eligible for any available financial assistance. The Porter-Cologne Act allows a regional water board to issue a cease and desist order when it finds that an illegal discharge of waste is taking place or threatening to take place, and to direct the violator to take remedial or preventive action. The Porter-Cologne Act also allows a regional water board to expend available money to perform cleanup, abatement, or remedial work of illegal discharges, and to recover the reasonable costs it incurs. The enforcement and cost recovery authority given to the regional water boards under the Porter-Cologne Act is

separate and distinct from the legal authority given to them and Toxics under the state Superfund law, which allows both entities to recover any costs they incur from liable persons. State law requires each regional water board to have nine members that the governor appoints and the Senate confirms.

### THE DEFINITION OF A BROWNFIELD CAN VARY

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as the federal Superfund law, defines a brownfield site as real property where the presence or potential presence of a hazardous substance, pollutant, or contaminant may complicate its expansion, redevelopment, or reuse. However, the federal Superfund law excludes from this definition sites such as proposed and existing National Priorities List (NPL) facilities, which generally are the nation's worst hazardous waste sites; facilities subject to a planned or ongoing removal action under the federal Superfund Program; and federal facilities.

The definition of brownfields by other entities varies. Cal/EPA has instituted a variety of programs designed to promote the redevelopment of brownfields, and each program may include different brownfield sites. For example, Toxics has three programs under its Site Mitigation and Brownfields Reuse Program. State law establishes the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program, which provides loans to finance the performance of any action necessary to respond to the release or threatened release of a hazardous material at an eligible property, or to pay for environmental insurance products to facilitate the development of the site. A brownfield is an eligible property under the CLEAN Program and is defined as an urban property that was previously the site of an economic activity that is no longer in operation and has been vacant or the occupant has had no economically productive activities for a period of not less than 12 months. CLEAN's brownfield definition excludes NPL sites and federal facilities, but it also excludes properties that will be the site of a contiguous expansion or improvement of an operating industrial or commercial facility.

In addition, Toxics manages the Expedited Remedial Action Program (expedited program), a pilot program that determines if expedited procedures for carrying out response actions at certain sites are appropriate and protective of human health and the environment. The expedited program does not explicitly define brownfields but does exclude NPL sites and federal facilities. Finally, Toxics' Voluntary Cleanup Program (voluntary program) allows it to provide regulatory oversight services to project proponents desiring to address mitigation activities at sites with lower health or environmental risks. The voluntary program does not explicitly define brownfields but excludes Cal/EPA Superfund sites, NPL sites, military facilities, sites under current enforcement action by Toxics, and sites under the oversight of other state or local regulatory agencies. Although Toxics did not explicitly define a brownfield site in its expedited or voluntary programs, the governing entity itself defines brownfields as properties that are contaminated or thought to be contaminated, which are underused due to perceived remediation costs and liability concerns.

The State Water Board administers two programs that address brownfields, SLIC and UST. SLIC allows the regional water boards to oversee investigations and cleanup and abatement activities for sites with an unauthorized discharge of hazardous substances, except underground petroleum storage tanks. UST exclusively addresses the cleanup of state water resources affected by unauthorized releases of petroleum and hazardous substances from underground storage tanks. The regional water boards and local agencies can oversee the remediation of tank sites with contamination.

### THE DEFINITION OF ORPHAN SHARES CAN ALSO VARY

Although several different orphan share definitions exist in state law, the federal Superfund law includes no definition of this term. When Congress enacted the federal Superfund law in 1980, it had two primary goals: to provide an efficient framework for cleaning up sites with contamination and to ensure that those who caused the pollution would ultimately bear the costs of cleanup.

The term orphan share does not exist in federal law or regulations, partly because the courts have historically interpreted the federal Superfund law as imposing joint and several liability on responsible parties when the United States Environmental Protection Agency (U.S. EPA) recovers costs it incurs in cleaning up hazardous waste sites. No orphan shares exist under a strict application of joint and several liability because, even though some share of the cleanup costs is not attributable to a responsible party, each must assume full responsibility for those costs. In 1986 Congress amended the federal Superfund law by passing the Superfund Amendments and Reauthorization Act, which allows the U.S. EPA to enter into settlement agreements with responsible parties to perform any response action to a hazardous substance release. Under the terms and conditions of a settlement agreement, the U.S. EPA would reimburse parties for certain costs of response actions that they have agreed to perform but which it has agreed to finance. An orphan site exists when the U.S. EPA cannot locate any of the responsible parties or when they are not financially viable.

California Superfund law is very similar to the federal Superfund law both in terms of the overall process for cleaning up sites and for imposing liability. One difference is that Toxics can pursue a cost recovery action using either a proportional standard of liability or the federal standard of joint and several liability. Proportional liability, as its name suggests, apportions liability among all identifiable potentially responsible parties using criteria such as the amount of hazardous substance for which each party may be responsible and its degree of involvement, care exercised, and cooperation. In general, Toxics uses joint and several liability for most cost recovery. The State Water Board and regional water boards also use joint and several liability for cost recovery. Under the State Water Board's SLIC program, the person or persons responsible for a discharge of hazardous waste are liable for the cost of its abatement or cleanup and for the oversight costs of a government agency. Also, under its UST program, the owner and operator of an underground storage tank are financially responsible for the costs of corrective action and compensating third parties for bodily injury and property damage due to a release from the tank.

However, unlike federal law, state law does define what constitutes an orphan share. In fact, in California, several different definitions of an orphan share apply to sites with contamination. The Johnston-Filante Hazardous Substance Cleanup Bond Act of 1984 (bond act) provided money for activities such as the removal or remedial actions for certain sites to the extent that the costs are not paid by responsible parties and the State's share of a removal or remedial action at federal sites. The bond act defined orphan shares as those costs of removal or remedial action at sites with a release or threatened release of hazardous substances that are in excess of the amounts included in a cleanup agreement. These cleanup agreements refer to agreements that potentially responsible parties enter into with either Toxics or a regional water board after their liability has been established by arbitration proceedings. The agreements allow Toxics or the regional water boards to recover costs they incur from a liable person or persons.

A second definition of orphan share applies to the Orphan Share Reimbursement Trust Fund. In 1999, when the Legislature reenacted the state Superfund law, it added a new provision establishing this trust fund to mitigate the payment of an orphan share by viable parties and to encourage responsible parties to quickly and efficiently remediate contamination. For purposes of the trust fund, state law defines orphan share as the share of liability for the costs of response action that is attributable to the activities of persons who the fund administrator deems defunct or insolvent. The third orphan share definition applies to the expedited program. State law defines orphan shares for this program as the share of liability for the costs of response actions belonging to responsible persons who are insolvent, unidentifiable, or unable to be found.

### SCOPE AND METHODOLOGY

The Joint Legislative Audit Committee requested that the Bureau of State Audits conduct an audit of the Cal/EPA and its entities involved in the cleanup of properties contaminated by hazardous materials and waste.<sup>2</sup> Four of the entities under Cal/EPA—Air Resources Board, Department of Pesticide Regulation, Integrated Waste Management Board, and the Office of Environmental Health Hazard Assessment—do not play a role in the cleanup of sites with hazardous materials and waste contamination; therefore, our audit focuses only on Toxics and the State Water Board. We were asked to provide information on how many orphan sites and sites with orphan shares exist in the State, as well as how much funding is needed and how much is directly available to clean up those sites.

<sup>&</sup>lt;sup>2</sup> California Health and Safety Code, Section 25501(o) defines hazardous materials as any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. The California Superfund law defines hazardous waste as a waste, or combination of wastes, that because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible, illness; or poses a substantial present or potential hazard to human health or environment due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence, when improperly treated, stored, transported, or disposed of, or otherwise managed.

To understand the State's regulatory responsibilities for addressing sites with hazardous materials and waste contamination, we reviewed relevant federal and state laws, regulations, and policies governing these activities. We found that the state Superfund law allows the attorney general, at the request of Toxics or a regional water board, to use either state or federal law to recover costs from the liable person. Consequently, we reviewed both state and federal Superfund laws to understand the cost recovery provisions of these laws. Our legal counsel assessed the relationships among the concepts of brownfields, orphan sites or sites with orphan shares, the federal Superfund law, and state laws and regulations.

To identify the number of Cal/EPA Superfund sites, orphan sites, or sites with orphan shares in California, we reviewed databases maintained by Toxics and the State Water Board. To assess the reliability and completeness of these two databases, we interviewed staff and examined relevant information, such as procedures, system narratives, and flowcharts. In addition, we tested, on a sample basis, some of the information within Toxics' database. Our assessment focuses on identifying the availability and reliability of data for the purposes of this audit only and does not represent a comprehensive evaluation of either database. We were able to use Toxics' Site Mitigation and Brownfields Reuse Program, Calsites, database to identify Cal/EPA Superfund and orphan sites. However, we were unable to use the State Water Board's database to identify brownfields and orphan sites because of concerns with the quality of data in certain fields that it contains. Therefore, we asked its staff to provide us with information on these sites.

Using data from Toxics' Calsites database as of March 20, 2003, we identified sites with contamination and categorized them based on their site status and site type. We excluded 4,557 sites for which Toxics considers remediation to be complete, where no requirement for any initial or further action exists, the contamination has yet to be confirmed, or that it referred to other agencies. We also excluded voluntary program sites where the responsible parties were able to complete the agreed upon actions or chose to terminate the agreement before the completion of the actions.

To identify the source of funds used to clean up orphan sites and sites with orphan shares, we reviewed the Governor's Budget for fiscal years 2000–01 through 2003–04 and interviewed Toxics' and State Water Board staff. To determine the amount of funds needed to address the orphan sites we discuss in our report, we asked Toxics to prepare an estimate for each site. To identify the funds used between July 1, 1998, and April 30, 2003, for orphan sites, we used Toxics' accounting records to determine the total costs and adjusted this amount by any cost recovery payments. We present in Appendix A a listing of accounts used by Toxics and the State Water Board to clean up contaminated sites, including a description of their statutory authority, funding sources, authorized uses, and fund balances.

To identify the impediments to cleaning up orphan sites and sites with orphan shares, we interviewed the management and staff of Cal/EPA, Toxics, and the State Water Board. In addition, we reviewed several reports issued by the U.S. General Accounting Office (GAO).

To determine the number of contaminated sites cleaned up under the federal Superfund Program that were orphan sites or sites with orphan shares, we identified those NPL sites listed in the federal Superfund Program's information system with a construction complete status. As of April 30, 2003, this information system reported the 43 NPL sites in California shown in Appendix B.<sup>3</sup> We also asked the U.S. EPA to provide us with sources of funding spent to remediate orphan sites and sites with orphan shares in California.

Finally, to identify the funding mechanisms used by other states to address orphan sites and sites with orphan shares, we reviewed publicly available information on the environmental programs in the states of Massachusetts, Michigan, New Jersey, Pennsylvania, and Wisconsin. We also interviewed representatives from these states. We chose these states because in its 2000 report titled *Brownfields, Information on the Programs of EPA and Selected States,* the GAO reported that, according to the U.S. EPA and other knowledgeable organizations, they were operating some of the largest or most innovative brownfields programs in the nation. ■

<sup>&</sup>lt;sup>3</sup> In its 2002 report titled *Information Technology: Comprehensive Environmental Response, Compensation, and Liability Information System Data Quality,* the U.S. Office of the Inspector General concluded that users do not have complete and error-free data regarding the status and activities of many sites, particularly non-NPL sites. However, since this system is the official repository of information on federal Superfund sites, we used the information it contains.

### CALIFORNIA LACKS A COMPREHENSIVE INVENTORY OF BROWNFIELDS, ORPHAN SITES, AND SITES WITH ORPHAN SHARES

S tate law does not require the entities under the California Environmental Protection Agency (Cal/EPA) that oversee the cleanup of contaminated sites, the Department of Toxic Substances Control (Toxics) and the State Water Resources Control Board (State Water Board), or the nine regional water quality control boards (regional water boards) to maintain a database to capture information on brownfields.<sup>4</sup> Although Cal/ EPA told us that these entities have never "purposed" to create a list of brownfields primarily because a site's presence on such a list can create a stigma or negative perception, it believes that there may be benefits to collecting general information relating to the scope and magnitude of brownfield sites in California.

Toxics maintains a database to track contaminated sites in the State. This database currently reports 46 orphan sites under its jurisdiction. The database is not able to track the number of sites with orphan shares; however, as of January 1, 2003, Toxics' program that addresses these sites, the Expedited Remedial Action Program (expedited program), has three sites that are eligible to receive orphan share compensation. Due to insufficient data in certain fields in the State Water Board's database that it uses to track contaminated sites, we were unable to identify the number of orphan sites under its jurisdiction. The State Water Board told us that its original intent for including codes to track responsible parties' status was to respond to a user's request for this information, but not to create a statewide database. Nevertheless, the State Water Board's unaudited data indicate that it has only seven orphan sites.

### Although Toxics' Database Can Track Orphan Sites, It Cannot Track Brownfields or Sites With Orphan Shares

State Superfund law requires Toxics to publish and revise, at least annually, a listing of the hazardous substance release sites it selects for cleanup action. Toxics must make this list available

<sup>&</sup>lt;sup>4</sup> The federal Superfund law defines a brownfield as real property where the presence or potential presence of a hazardous substance, pollutant, or contaminant may complicate its expansion, redevelopment, or reuse. California does not have a uniform definition of brownfields.

to the public. In 1991 Toxics created its Calsites database to fulfill this requirement. Calsites provides users with a variety of information on the sites, including a brief history of cleanup activities, contaminants of concern such as dioxin or pesticides, and a schedule of future cleanup activities. Toxics also uses Calsites to track data on sites not identified as state Superfund sites. For example, in 1998, Toxics began tracking data on the environmental assessments it reviews or performs for the Office of Statewide Health Planning and Development, Cal-Mortgage Loan Division. These assessments are required for the real estate due diligence process and do not necessarily identify instances of a release of hazardous substances.

In 2002 Toxics created the Site Mitigation and Brownfields Reuse Program database, which it also refers to as Calsites, to eliminate confusion about the many different types of properties that were previously included in the old Calsites database. Although the database title would lead one to believe that Toxics identifies brownfields and their reuse, the new database does not track this data. According to Toxics, due to limitations with the current database application and the availability of programming staff, it cannot modify the database to include a field identifying brownfield reuse.

We did note that Toxics' Calsites database has four fields to track commercial, industrial, residential, and unknown types of acres available for reuse, which could facilitate the tracking of brownfields data. Toxics intended these fields to track the number of acres made available for reuse at the closing of military bases. Toxics also stated that it did not require staff to enter data in these fields. Consequently, its data are incomplete.

Toxics is aware that Calsites does not meet its increasing data needs and states that it is assessing new database applications. Toxics plans to develop and implement upgrades to Calsites, making it capable of integrating certain data and the progress of contaminated sites with its other databases and the databases of the State Water Board and regional water boards. Additionally, on May 30, 2003, Toxics submitted its Brownfield Cooperative Agreement application to the United States Environmental Protection Agency (U.S. EPA) to obtain funding for, among other things, the completion of further upgrades to its database. If Toxics receives the funding, it plans to work with the State Water Board and regional water boards to maintain and display accurate geographical information on brownfield sites and other properties that pose environmental concerns. Until it obtains

Although its title may lead one to believe that it tracks brownfields, Toxics' Site Mitigation and Brownfields Reuse Program database does not track these sites or their potential for reuse. the funding from the U.S. EPA and upgrades its database to identify brownfields and their reuse, the State will be unable to track efforts to promote the reuse of properties with contamination. Table 1 shows the number of properties with contamination, by program and funding source, that were undergoing cleanup either as of January 1, 2003, or March 20, 2003.

### TABLE 1

	Funding Source for Cleanup				
Status	Responsible Party*	Orphan Site <sup>†</sup>	Orphan Share <sup>‡</sup>		
Voluntary Cleanup Program	481				
Annual work plan sites§	228	36			
Certified operation and maintenance <sup>II</sup>	105	4			
Backlog sites#	38	6			
Removal action required**	25				
Expedited Remedial Action Program	8		3		
Totals	885	46	3		

### Contaminated Sites in California Under Toxics' Jurisdiction

Sources: Toxics' Calsites database as of March 20, 2003; Toxics' Report on California Expedited Remedial Action Reform Act of 1994, dated January 1, 2003.

- \* Can include the federal departments of Defense and Energy and private parties.
- <sup>†</sup> A site that lacks identifiable responsible parties; or where the responsible parties are insolvent, unable to be found or refuse to cooperate.
- <sup>‡</sup> The share of liability for the costs of response actions attributable to responsible parties who are insolvent, unidentifiable, or unable to be found.
- § Also known as state Superfund sites and generally high priority.
- Previously identified as sites with confirmed hazardous substances releases where cleanup actions have been taken but ongoing maintenance is required.
- <sup>#</sup> Sites with confirmed hazardous substances releases that do not represent an immediate hazard.
- \*\*Sites that do not warrant placement in the annual work plan but still require cleanup, removal, or mitigation of hazardous substances.

Toxics considers its Voluntary Cleanup Program (voluntary program) and expedited program key drivers for addressing brownfields. Table 1 shows that more than 50 percent of the sites are in the voluntary and expedited programs. However, not all sites with contamination shown are brownfields. The voluntary program provides regulatory oversight services to project proponents desiring to address mitigation activities at sites with lower health or environmental risks. The voluntary program encourages the redevelopment of brownfields by allowing project proponents to set the pace for investigating and remediating their sites with Toxics' oversight. Additionally, the expedited program encourages the redevelopment of brownfields because it provides economic and liability incentives to motivate persons to voluntarily remediate their contaminated property. For example, potential state funding exists for up to 10 sites with orphan shares, and Toxics indemnifies participating responsible persons through a covenant not to sue.

As previously shown in Table 1, 36 annual work plan properties are orphan sites. Calsites has three codes to identify orphan sites. Toxics' designation of a site as an orphan is a fluid process because the status will change as it obtains additional information concerning the site and the responsible parties. However, orphan sites should not exist in either the voluntary or expedited programs because both programs require the participation of at least one responsible party or project proponent willing to fund cleanup. To quantify the number of sites with orphan shares is even more difficult because these sites are not readily identifiable. Calsites lacks a code to identify sites with orphan shares. According to Toxics' January 1, 2003, report on the expedited program, three sites are eligible to receive orphan share funding, which we include in Table 1.

### Insufficient Data Also Impedes Comprehensive Reporting of Contaminated Sites Under the Jurisdiction of the State Water Board

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act), which governs regional water boards, does not require the State Water Board to track brownfields and their reuse. State law does, however, require the State Water Board to maintain a statewide geographic information system to collect, store, retrieve, analyze, and display geographic environmental data from cases involving discharges of petroleum from underground storage tanks and fuel pipelines that are within 1,000 feet of a drinking water well. The State Water Board refers to this system as Geotracker. It chose to include in its Geotracker other types of sites with contamination such as sites from its Spills, Leaks, Investigations, and Cleanup (SLIC) Program.

Geotracker contains two fields that track whether or not a site is part of a brownfield. However, 91 percent of these two fields were blank for the 47,000 sites listed in Geotracker. In addition, Geotracker has four identification codes for responsible parties that indicate whether the responsible party is (1) unidentifiable,

Designating a site as an orphan is a fluid process because the status can change as Toxics obtains additional information about the site and the responsible parties. Fields and identification codes that could track whether a site is part of a brownfield or whether a responsible party is viable were 91 percent and 79 percent blank, respectively, for the 47,000 sites listed in the State Water Board's Geotracker database. (2) identifiable but insolvent, (3) identifiable but uncooperative, or (4) identifiable and solvent. These codes could be a valuable tool for the State Water Board to easily identify orphan sites. However, 79 percent of the 47,000 sites in Geotracker do not contain information in these four identification codes. According to the State Water Board, the purpose of the brownfield indicator and these four responsible party identification codes was to address a user's request to track this information, but not to create a statewide database. Moreover, the State Water Board believes that if it were to require the regional water boards to use the brownfield indicator, the information captured would reflect each project manager's definition of a brownfield does not exist. Thus, it did not require mandatory reporting of this information.

Due to the incompleteness of the data in Geotracker for the fields and codes relating to brownfields and responsible parties, we were unable to identify the number of brownfields and orphan sites under the State Water Board's jurisdiction, including the SLIC and Underground Storage Tank (UST) programs that it believes aid in the redevelopment of brownfields. The State Water Board's unaudited data indicate that it has only seven orphan sites to which it has committed a total of \$1.4 million in state resources. However, the State Water Board told us that orphan shares do not exist since the nine regional water boards apportion liability for cleanup using a strict application of joint and several liability. Under a strict application of joint and several liability there are no orphan shares because even though some share of the cleanup costs is not attributable to a responsible party, each must assume full responsibility for those costs.

### SITES WITH INSOLVENT, DEFUNCT, OR UNIDENTIFIABLE RESPONSIBLE PARTIES RELY ON STATE OR FEDERAL FUNDING TO PAY FOR CLEANUP

Toxics receives the majority of its funding for cleanup from an environmental fee on corporations. Although revenues from these fees have remained relatively stable, the State has recently reduced the amount of State General Fund (General Fund) appropriations made available to cover cleanup costs. The State Water Board receives most of its funding for cleanup from a fee imposed on owners of underground storage tanks, and from court judgments and administrative civil assessments for the illegal discharge of hazardous materials. For fiscal year 2002–03, the State Water Board expects these fines and penalties to generate \$26 million—a significant though likely nonrecurring increase from prior years. To cover cleanup costs, Toxics anticipates needing \$124 million to \$146 million for the long-term remediation of existing orphan sites and \$2.4 million in orphan share compensation during fiscal year 2003–04.

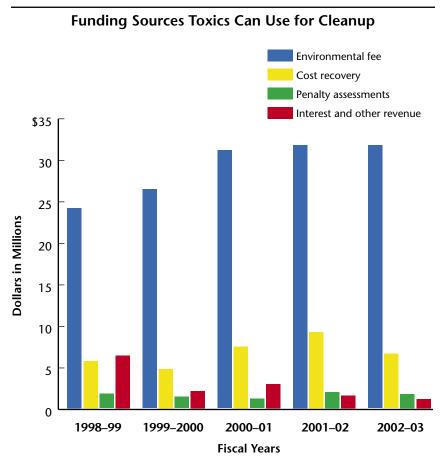
# Toxics Must Rely More on Fees to Fund Orphan Site Cleanup Efforts

General Fund appropriations for the cleanup of sites with contamination have recently declined, while funding from Toxics' major source, an environmental fee, remains relatively stable. When Toxics is unable to identify a responsible party or project proponent willing and able to fund cleanup, it may use state funds to pay for remediation costs that the federal Superfund Program does not pay. Typical cleanup costs can include contractor charges to address site contamination, including the removal, treatment, or disposal of any hazardous materials, and ongoing monitoring of any environmental controls at the site, such as vapor extraction and treatment systems.

State law establishes various sources that Toxics can use to fund its cleanup efforts when responsible parties are not paying the total cost. Its primary source of funding for cleanup is the environmental fee that the State levies annually on corporations that use, store, or conduct activities relating to hazardous materials. Manufacturers use hazardous materials to produce such common items as paper, ink, and plastic products. Depending on the number of staff a corporation employs in calendar year 2003, its fees can range from \$231 to \$11,037. Toxics deposits these fees into its main account for cleanup, the Toxic Substances Control Account. For a complete listing of accounts that state law allows Toxics to use for cleanup and a description of their statutory authority, funding sources, authorized uses, and fund balances, see Appendix A.

Toxics also uses revenues resulting from the assessment of fines and civil, criminal, and administrative penalties collected under several environmental laws. For example, any person who knowingly or with reckless disregard for the risk, treats, handles, transports, disposes of, or stores any hazardous waste in a manner that causes any unreasonable risk of fire, explosion, serious injury, or death can be punished by a fine of not less than \$5,000 and up to \$250,000 for each day of violation. In addition, Toxics deposits cost recovery payments into three of its accounts that fund cleanup. Cost recovery reflects payments

Funding from Toxics' primary source, an environmental fee levied on corporations, remains relatively stable; however, General Fund appropriations for cleanup have recently declined. from identifiable responsible parties to reimburse the State for funds it expends to clean up a site. Figure 2 shows the various revenues from certain accounts shown in Appendix A between fiscal years 1998–99 through 2002–03.



### **FIGURE 2**

Sources: Governor's Budget for fiscal years 2000–01 through 2003–04. Note: Data we present for fiscal year 2002–03 is an estimate.

Toxics' primary revenue source has remained relatively stable for the past three fiscal years. However, General Fund appropriations continue to decline. Between fiscal years 1998–99 and 2000–01, Toxics received annual General Fund appropriations of \$4.8 million to fund direct site cleanup costs. For fiscal year 2001–02, the Governor's Budget shows no General Fund appropriations deposited into its Toxic Substances Control Account. However, Toxics did receive a General Fund appropriation of \$1.5 million that it deposited into its Site Remediation Account. The Governor's Budget also shows a significant decrease in General Fund appropriations for the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Account. The General Fund initially appropriated \$85 million in fiscal year 2000–01 for CLEAN, but the Governor's Budget shows that in the next fiscal year \$77 million of this appropriation was transferred back to the General Fund. CLEAN provides financing to respond to the release or threatened release of hazardous materials on eligible property such as a brownfield. Although Toxics issued six loans from the CLEAN account, it has no plans to issue any new loans because of the State's current economic condition.

Toxics' expedited program obtains its orphan share funding from the Expedited Site Remediation Trust Fund. Created in 1994, this trust fund receives appropriations from the Toxic Substances Control Account and interest payments to pay for the cleanup of costs attributable to responsible parties who are insolvent, unidentified, or unable to be found. Between fiscal years 1998–99 and 2001–02, the trust fund received about \$2.2 million for site cleanup. During the same period, Toxics disbursed \$1.2 million in orphan share compensation to eligible participants. Toxics estimates that it will provide \$2.4 million in orphan share compensation in fiscal year 2003–04. Finally, the Legislature created the Orphan Share Reimbursement Trust Fund in 1999. However, this trust fund still does not have a revenue source.

### The State Water Board Receives Most of Its Funding From Fees and Penalties

The State Water Board deposits money it receives from court judgments and the assessment of administrative civil liabilities for illegal discharges into the State Water Pollution Cleanup and Abatement Account within the State Water Quality Control Fund. Between fiscal years 1998-99 and 2001-02 the State Water Board collected \$19 million in fines and penalties. However, for fiscal year 2002-03, the State Water Board expects these fines and penalties to generate \$26 million, a significant increase from prior years. The State Water Board attributes this increase primarily to a \$20 million penalty assessed against a major company. Currently, it has allocated \$117,250 from the account for regional water boards to oversee the cleanup of two orphan sites. The State Water Board, regional water boards, and public agencies can use this account to contract for services to clean up or abate the effects of a waste discharge, remedy an actual or potential unforeseen health threat, or pay for costs they incur for cleanup efforts and administration. The State Water Board is responsible for allocating the funds to the various cleanup and abatement projects.

Toxics expects to provide \$2.4 million in orphan share compensation in fiscal year 2003–04 from the Expedited Site Remediation Trust Fund. The State Water Board has committed \$1.3 million to the cleanup of an abandoned tank using revenues from a regulatory fee it deposits into the Underground Storage Tank Cleanup Fund. The State Water Board deposits revenues from the underground petroleum storage tank fee into the Underground Storage Tank Cleanup Fund. The State requires owners of underground storage tanks to pay a regulatory fee, which is currently 1.2 cents for each gallon of petroleum they store.<sup>5</sup> Between fiscal years 1998–99 and 2001–02 this fund has collected an average of \$191 million annually. Owners and operators can use this fund to meet federal financial responsibility requirements for taking corrective action and compensating third parties for bodily injury and property damage under certain circumstances. An owner or operator can receive reimbursement from the fund for up to \$1.5 million for each occurrence, less the appropriate deductible. Additionally, the Emergency, Abandoned, Recalcitrant Account within the fund pays for regional water boards and local implementation agencies to initiate corrective action at, among other things, abandoned underground storage tanks. The State Water Board is currently committed to spending \$1.3 million to fund the cleanup of an abandoned underground storage tank.

### Funding for Cleanup May Also Come From Federal Sources

In addition to the sites that Toxics and the State Water Board are responsible for cleaning up, the U.S. EPA manages the remediation of National Priorities List (NPL) sites, or federal Superfund sites that are in California. The NPL sites are the nation's most hazardous waste sites. As of April 30, 2003, the U.S. EPA's Comprehensive Environmental Response, Compensation, and Liability Information System reported 43 NPL sites in California with a "construction completion" status, which are shown in Appendix B. Sites qualify for construction completion status when any necessary physical construction is complete, whether or not final cleanup levels or other requirements have been met; when the U.S. EPA determines that the response action does not involve construction; or when it removes a site from the NPL. For example, for one NPL site, the construction of a groundwater extraction and treatment system was completed in the fall of 1992, yet the system continued to reduce significant contamination at the site until 1993.

The courts have generally interpreted the federal Superfund law as imposing joint and several liability, which means that one or more persons can be held liable for the entire cost of the cleanup, regardless of the share of waste that each person

<sup>&</sup>lt;sup>5</sup> The fee does not apply to motor vehicle fuel or heating oil used for noncommercial purposes and placed in tanks that have a capacity of 1,100 gallons or less located on farm or residential property.

Toxics has spent approximately \$4.5 million on the cleanup of 43 federal Superfund sites. contributes. However, according to the U.S. EPA's director of the Superfund Division, as an incentive to induce parties to agree to conduct cleanups, the U.S. EPA created an orphan share policy under which it will forgo recovery of a portion of its past and future costs at certain sites if some or all of the responsible parties join in a settlement to conduct the cleanup. According to the U.S. EPA, it did not offer orphan share compensation to any of the 43 sites with the construction completion status. Instead, responsible parties fully funded the cleanup of 39 sites, the federal Superfund Program funded the cleanup of three orphan sites and one site received funding from various sources. The federal Superfund Program's authority to tax the chemical and petroleum industries expired in 1995 and has not been renewed. The program receives congressional appropriations from the federal Hazardous Substance Superfund that is currently replenished through the U.S. EPA's cost recovery program, and general revenues. However, when the federal Superfund Program pays for the cleanup of an orphan site, the state in which it is located must also contribute at least 10 percent of the costs of the remedial action, including all future maintenance. Toxics reports they have spent approximately \$4.5 million on these 43 sites.

### Toxics Estimates That Its Future Costs for Orphan Sites May Require up to \$146 Million

Each year, Toxics identifies the orphan sites, develops a cost estimate for each site, and uses a uniform scoring method to determine the sites that will receive funds during the next fiscal year. In fiscal year 2002–03, it allocated \$4 million for 16 of the orphan sites listed in Table 1 on page 15. Toxics told us that between July 1, 1998, and April 30, 2003, it spent \$9.7 million on orphan sites, excluding cost recovery amounts it received from responsible parties.

Toxics does not typically develop total cost estimates for sites at the early stages of its investigation or in the early cleanup phases because of the multitude of unknown factors at the site. Upon our request, Toxics prepared an estimate of the long-term remediation costs for 35 of the 46 orphan sites shown in Table 1. It included costs that were known because the remediation at the sites was far enough along or costs that were estimated based on work done at similar sites. Toxics calculated personnel costs considering the risk assessment, design and implementation, and operation and maintenance phases of the work. Using this approach, it estimates costs ranging from \$69 million to \$86 million as of May 20, 2003, for the 35 sites. Toxics did not include an estimate for 11 of the 46 orphan sites listed in Table 1 because it found that Calsites incorrectly identified six sites with responsible parties as orphans, that four sites are no longer orphans, and that it had combined the remaining site with another orphan site. However, the department found 10 other orphan sites that are not shown in Table 1 because staff did not enter them in Calsites as orphans. As of June 2003, it estimates that the long-term remediation costs for these sites could range between \$55 million and \$60 million. Toxics' staff told us that it will modify Calsites to correctly show the orphan status of these sites.

# Other States Use a Variety of Methods to Finance the Cleanup of Brownfields and Orphan Sites

Similar to California, other states look to a variety of sources to fund the cleanup and/or redevelopment of brownfields and orphan sites. California uses many of the same funding sources as the states of Massachusetts, Michigan, New Jersey, Pennsylvania, and Wisconsin, including general obligation bonds, penalty assessments, and cost recovery from responsible parties. Table 2 on the following page shows the funding sources reported by the five states and which of these sources California uses.

These other states use 12 sources to pay for the cleanup of contaminated sites that California does not; however, California uses some sources that these other states do not. For instance, Michigan uses unclaimed bottle deposits to pay cleanup costs. Although California law requires a distributor of beverage containers to make a redemption payment for every nonrefillable container sold or transferred to a dealer, aside from paying for refunds and certain administrative costs, generally this money must be used only for beverage container recycling or litter reduction activities. In addition, California does not use taxes to directly fund site cleanups, as does New Jersey. However, it does use an environmental fee paid by corporations that use, store, or conduct activities relating to hazardous materials, and a regulatory fee paid by owners of underground storage tanks for each gallon of petroleum they store. Moreover, Michigan uses revenues from the sale of the economic share of royalty interest that it holds in hydrocarbons produced from shale rock, which qualifies for certain federal tax credits. California does not use revenue of this type to fund site cleanups.

### TABLE 2

### California Uses Some of the Same Funding Sources Used by Other States for the Cleanup of Orphan Sites

Sources	Massachusetts	Michigan	New Jersey	Pennsylvania	Wisconsin	California*
Corporate business tax			Х			
Cost recovery from responsible parties	Х	Х		Х	Х	Х
Dry cleaning fees					X†	
Fines and/or penalties	Х	Х	Х	Х	Х	Х
General funds	Х			Х	Х	Х
General obligation bonds	Х	х	Х		х	Х
Hazardous waste control fees	Х			Х	х	
Interest	Х	Х	Х	Х	Х	Х
Land disposal permit					х	
Landfill tipping fees					Х	
Legislative appropriations	Х			Х	х	X‡
Natural resource damage claims	Х	X§		Х	Х	Х
Pesticide and fertilizer fees					х	
Petroleum and chemical industries tax			Х			
Petroleum inspection fee					XII	
Royalties		Х				
Sanitary permit and groundwater surcharge					х	
Unclaimed bottle deposits		Х				
User fees for department services	Х				х	Х
Vehicle environmental impact fee					Х	

Sources: Massachusetts Department of Environmental Protection, Michigan Department of Environmental Quality, New Jersey Department of Environmental Protection, Pennsylvania Department of Environmental Protection, Wisconsin Department of Natural Resources, California's Governor's Budget for fiscal years 2000–01 through 2003–04, California Health and Safety Code, and California Water Code.

\* For a complete listing of the funding sources that California uses, please refer to Appendix A.

<sup>†</sup> Wisconsin imposes fees on owners of dry cleaning facilities and persons who sell dry cleaning solvent. California has pending legislation that would impose fees on current or prior owners or operators of active or abandoned dry cleaning facilities, and persons who sell tetrachloroethelyne or perchloroethelyne in the State.

<sup>‡</sup> Legislative appropriations refer to any other appropriations that we do not separately identify.

<sup>§</sup> Michigan's natural resource damage claim relates to the cost it incurs for assessments and remediation.

"Wisconsin assesses a fee on all petroleum products brought into the State.

New Jersey's constitution requires it to credit 4 percent of the revenue it derives annually from corporate business taxes into a special account in the General Fund used to pay or finance the remediation of hazardous substances discharges; for

providing funding for the upgrade, replacement, or closure of underground storage tanks and the costs of remediating any discharge from them; and for paying or financing activities related to monitoring or preventing water pollution. However, unlike New Jersey, California's constitution does not include such a provision. California deposits its solid waste disposal fees that each operator of a disposal facility pays into the Integrated Waste Management Account. State law limits disbursements from this account primarily to the State Water Board's and regional water board's administration and implementation of the Porter-Cologne Act at solid waste disposal sites and to fund their regulatory activities for solid waste landfills. California's Environmental Cleanup and Fee Reform Act of 1997 revised how the State appropriates fee revenues to pay for sites cleanups. The act prohibits the use of fees deposited in the Hazardous Waste Control Account, including those imposed on owners of facilities used to treat, store, dispose, or recycle hazardous waste, and creates the Toxic Substances Control Account shown in Appendix A, which is used to fund cleanup. These fees are now used for regulatory activities such as administration, fee refunds, to perform or review analyses of public health effects related to toxic substances, and to support the Toxic Substance Enforcement Program in the Office of the Attorney General.

### THE REDEVELOPMENT OF BROWNFIELDS FACES ADDITIONAL CHALLENGES AT BOTH THE STATE AND NATIONAL LEVEL

Since the mid-1990s, interested parties, including federal agencies, nonprofit organizations, educational institutes, professional organizations, and the State of California, have studied impediments to the redevelopment of brownfields. Our report focuses on the impediments that the U.S. General Accounting Office raises concerning cleanup liability provisions and fiscal constraints.

# Liability Provisions May Inhibit the Cleanup or Reuse of Contaminated Brownfields

In December 2000, the U.S. General Accounting Office issued a report titled *Brownfields, Information on the Programs of EPA and Selected States,* which stated that the potential for being held liable under the federal Superfund law for the contamination on brownfield properties is a significant barrier to redevelopment according to lenders, property purchasers such as developers, and property owners. The report also points out that although most brownfields will not make the list of

# The federal Superfund law's broad definition of responsible parties includes the following:

- Current owners or operators of a facility.
- Past owners or operators of a facility at the time of disposal of a hazardous substance.
- Anyone who arranges for the disposal, transport, or treatment of the hazardous substances they own or possess.
- Transporters of hazardous substances who selected the disposal site.

potential NPL sites because their contamination is less severe, investors are still wary of the cleanup provisions of federal and state legislation since both can apply even at non-NPL sites. As a result, lenders and developers may avoid investing in properties with potential contamination, and current owners may avoid selling them.

Federal Superfund law applies to sites where there has been a release of hazardous substances ranging between one pound and 5,000 pounds. The U.S. EPA has identified roughly 800 hazardous substances. The federal law uses a broad definition to identify those persons who are potentially liable for cleanup costs, known as responsible parties. Courts have interpreted the federal law

as imposing strict liability on responsible parties, which means liability without regard to fault. Under a strict liability standard, a person who engages in an activity that the court considers "abnormally dangerous," such as using, disposing of, or treating hazardous substances, can be held liable for any harm the activity causes, regardless of the careful performance of that activity.

The courts have also interpreted federal Superfund law as allowing for the application of retroactive liability, so that a person can be held liable for cleanup costs even for activities that took place before the law's effective date. Lastly, the courts have generally interpreted the federal law as imposing joint and several liability, which means that one person can be held liable for the entire cost of the cleanup, regardless of the share of waste that each person contributes. However, if a responsible party is able to demonstrate that his or her harm is divisible from the harm of others, a court may apportion liability according to fault. Further, the federal law allows any person to seek contribution from any other person who is liable or potentially liable for cleanup.

The state Superfund law allows Toxics and the Office of the Attorney General to pursue legal, equitable, or administrative remedies using either federal Superfund or state law. The state law uses the same broad definition for responsible party that the federal Superfund law does and also imposes strict liability on these parties. The state law differs in that it does not allow retroactive liability as the federal law does, but the state law does allow for the use of the standard of proportional liability, which the federal law does not. Proportional liability, as the name implies, apportions liability among all identifiable potentially responsible parties using criteria such as the amount of hazardous substance for which each party may be responsible and his or her degree of involvement, care exercised, and cooperation.

A recent change in federal law is designed to significantly affect liability issues. The federal Small Business Liability Relief and Brownfields Revitalization Act (revitalization act) enacted on

Congress required the U.S. EPA to establish by January 2004 standards and practices for conducting all appropriate inquires that include:

- The results of inquiries made by an environmental professional.
- Interviews with past and present owners, operators, and occupants.
- Searches for environmental cleanup liens.
- Reviews of federal, state, and local government records.
- Visual inspection of the facility and adjoining properties.

Source: U.S. EPA Web site.

January 11, 2002, among other things, no longer considers as an owner or operator persons who own real property that is contiguous to property that they do not own that may be contaminated by a release or threatened release of a hazardous substance. The revitalization act also exempts certain prospective purchasers from federal Superfund law liability if the person acquires the facility after its enactment date. Generally, both contiguous property owners and prospective purchasers must, at the time they acquire the property, meet various requirements such as conducting all appropriate inquiries with respect to the property. They must also take reasonable steps to stop any continuing releases; prevent any threatened future release; and prevent or limit human, environmental, or natural resource exposure to any hazardous substance. Finally, the revitalization act amends federal Superfund law to clarify the actions landowners must take to

establish that they had no reason to know about a release or threatened release of a hazardous substance after making all of the appropriate inquiries.

Over the years California has also enacted laws to address the impact that liability issues may have on the cleanup of contaminated sites. California's Hazardous Materials Liability of Lenders and Fiduciaries Act of 1996 provides that a person, by reason of acting in the capacity of a lender, shall not be liable for any release or threatened release of a hazardous material at, from, or in connection with the property under any state or local law, regulation, or ordinance requiring a removal or remedial action; the payment of a penalty, fine, imposition, or damages assessment; or the forfeiture of certain properties. It also provides that a person, by reason of acting in the capacity of a lender, shall not be liable if the statute, regulation, or ordinance authorizes damages arising from the release or threatened release of hazardous materials at the property. Finally, the act limits the liability of a fiduciary of any person who meets this requirement to the assets held in the fiduciary estate.

The Polanco Redevelopment Act of 1998 assists those agencies that take action to respond to a release of hazardous substances on, under, or from contaminated property in a redevelopment project by providing them with immunity from state and local liability. An agency may take any action it deems necessary that is consistent with state and federal laws to remedy or remove a release of hazardous substances from properties within a project area, whether the agency owns that property or not. However, the agency must obtain cleanup guidelines and approval for its action plans from either Toxics or the regional water boards. Under the act, any agency that remedies or removes a hazardous substance release in accordance with approved plans is no longer liable for that release. This immunity extends to employees and agents of the agency, redevelopers who acquire the property, persons who acquire the property once the redevelopment is complete, or any person who provides financing to the redeveloper or subsequent purchaser. However, the immunity does not apply to certain persons, such as responsible parties and contractors who prepare the agency's cleanup or remedial action plan.

The California Land Environmental Restoration and Reuse Act of 2001 provides that upon Toxics' or a regional water board's issuance of a written determination of satisfactory completion of a site investigation and remedial action plan for certain sites, local agencies, property purchasers, developers, and financiers will be immune from liability under various state and local laws for any hazardous materials release that the plan identifies and addresses.

Cal/EPA told us that liability for environmental conditions on properties and its consequence on property transactions is complex. Although Cal/EPA believes that the federal Superfund law's liability provisions have been a strong inducement that often compels owners, operators, and regulatory agencies to take action to clean a site, it acknowledges that this liability can be an impediment to redevelopment since buying any property with contamination can result in new owners assuming responsibility for potentially large cleanup costs, experiencing significant project development delays, and exposing themselves to the possibility of third-party lawsuits. Further, it believes that the degree to which federal Superfund liability is or remains

Cal/EPA acknowledges that the federal Superfund law's liability provisions can be an impediment to redevelopment because buying a property with contamination can result in new owners assuming responsibility for potentially large cleanup costs, experiencing significant project development delays, and exposing themselves to the possibility of thirdparty lawsuits.

an impediment to the redevelopment of brownfields may have more to do with the experience of the parties involved in the real estate transaction than with liability issues.

# Limited Opportunities Exist for Funding the Cleanup of Brownfields

In testimony it gave before the U.S. Senate's Subcommittee on Superfund, Waste Control, and Risk Assessment of the Committee on Environment and Public Works in 1997, the U.S. General Accounting Office reported that the federal and state Superfund programs do not have the capacity to address brownfields because of limited resources. Cal/EPA agrees that the state Superfund program does not have the fiscal resources to clean up and prepare all sites with contamination for development, explaining that its efforts so far on orphan sites have been on a few sites with high contamination. For example, Toxics reports that the Port of Long Beach, a former vacant disposal facility and state Superfund site, was successfully remediated in 1997 and is now home to a national distribution center for Toyota Motor Sales, Inc., and a marine container terminal for the Hanjin Shipping Company. However, it also told us that thousands of other brownfield properties lay fallow awaiting investigation, cleanup, and development.

Additionally, Toxics' voluntary program requires a project proponent who will commit to pay all cleanup costs. Toxics' expedited program also requires at least one responsible party who is willing to pay all costs not paid by the State for orphan shares or by another responsible party. Similarly, the State Water Board's SLIC Program is set up to recover from responsible parties the reasonable expenses that it and the regional water boards incur in overseeing water quality matters. The State Water Board's UST Program uses funds from the Emergency, Abandoned, Recalcitrant Account to address unauthorized releases at an abandoned site or if the responsible party is unwilling or unable to take corrective action. Therefore, except for the UST Program's special account, funding may not be available for brownfields if neither a project proponent nor a responsible party will pay for the cleanup or oversight costs.

Furthermore, the State has significantly reduced the amount of funding available to cover cleanup costs in a few recent state brownfields initiatives. As previously mentioned, in fiscal year 2001–02 the State transferred back to the General Fund \$77 million of the \$85 million it had allocated to fund

With the exception of the Underground Storage Tank Program, State funding may not be available for brownfields if there is no project proponent or responsible party willing to pay for cleanup or oversight costs. the CLEAN Program the year before. At the end of fiscal year 2001–02 the CLEAN Account had a remaining fund balance of only \$1.2 million. Additionally, the Financial Assurance and Insurance for Redevelopment (FAIR) Program was established in 2001 to allow the State to use a competitive bid process to select an exclusive provider of environmental insurance. The provider would offer its products at an affordable price to recipients of loans under the CLEAN Program and any other person who conducts a response action in the State. Initially, the FAIR Program was to offer financial subsidies of up to 50 percent of the cost of environmental insurance premiums or up to 80 percent of the self-insured retention amount of the cost overrun insurance, not to exceed \$500,000. However, due to current economic conditions the State has also withdrawn funding for these subsidies.

### **Elements of a State Response Program**

States seeking funds available under the revitalization act must ensure that their response programs contain the following elements:

- Timely survey and inventory of brownfield sites in the state.
- Adequate oversight and enforcement to ensure that the response action will protect human health and the environment, comply with federal and state laws, and be completed.
- Opportunity for public participation.
- An adequate approval process for cleanup plans and a verification and certification process indicating that the response is complete.

Source: Small Business Liability Relief and Brownfields Revitalization Act, Section 128.

The revitalization act provides grants and loans to states, local governments, and other eligible participants to inventory, characterize, assess, conduct planning, and remediate brownfields. Beginning in federal fiscal year 2002 and extending through federal fiscal year 2006, the revitalization act authorizes funding up to \$200 million annually in grants and loans. Eligible participants can receive maximum grant amounts of up to \$350,000 to characterize and assess individual brownfield sites. Additionally, eligible participants such as a state or local government can receive up to \$1 million for the direct remediation of brownfield sites they own. However, according to the chief of its Planning and Management Branch, Toxics has not made any comprehensive efforts to identify sites that may qualify for the up to \$1 million grant. Therefore, it could be missing an opportunity to benefit from such a grant.

The revitalization act also authorizes up to

\$50 million annually so that states can establish or enhance their response programs. For federal fiscal year 2003, states can receive a maximum grant amount of \$1.5 million. Finally, the revitalization act allows for funding so that eligible participants or nonprofit organizations can establish a program of training, research, and technical assistance to individuals and organizations that desire to implement its provisions.

On May 30, 2003, Toxics submitted to the U.S. EPA its application to receive a state response program grant. However, Toxics chose not to compete for the grants relating to the assessments and Toxics and the State Water Board did not apply for all available federal grant money related to the assessment and cleanup of contaminated sites. cleanup of brownfields or to establish a training, research, and technical assistance program. According to the chief of planning and management of the Site Mitigation and Brownfields Reuse Program, Toxics did not apply for these two grants because it believes that the U.S. EPA is targeting local governments and nonprofits. However, the U.S. EPA told us that states are eligible, but it is up to them to decide whether they want to apply for these grants. In fact, as of June 20, 2003, the U.S. EPA has awarded \$73.1 million for grants made available by the revitalization act, some of which have gone to states. Thus, Toxics has chosen to forgo funding of up to potentially \$1.35 million relating to brownfield assessments and cleanup as well as roughly \$200,000 to establish a program in California that would assist individuals and organizations in their efforts to benefit from the revitalization act.

Furthermore, according to the chief of its budget branch, the State Water Board did not apply for any of these grants because it believed Toxics would apply for them. However, the revitalization act requires 25 percent of the funding made available for brownfield assessment and cleanup be spent on sites contaminated by petroleum or petroleum products providing the site is relatively low risk in comparison with other petroleum-only sites in the State; lacks a viable responsible party and will be assessed, investigated, or cleaned up by a person that is not potentially liable for cleanup; and is not subject to any orders. This funding requirement also includes mine-scarred land. The State Water Board's unaudited data indicate that it has only seven orphan sites. We found that two sites are abandoned underground storage tanks and four are mine-scarred properties. Thus, by not applying, the State Water Board is missing an opportunity to receive funding that could supplement its efforts to remediate orphan sites.

### RECOMMENDATIONS

If Toxics does not receive funding from the U.S. EPA, Cal/EPA should seek guidance from the Legislature to determine if it desires a database to track efforts to promote the reuse of properties with contamination. If the Legislature approves the development or upgrade of a statewide database that includes relevant data to identify brownfield sites and their planned and actual uses, Cal/EPA should establish a uniform brownfield definition to ensure consistency.

To obtain a comprehensive listing of the number of orphan sites and sites with orphan shares, the Legislature should consider requiring Cal/EPA and its entities to capture the necessary data in their existing or new databases.

To reduce the State's brownfield assessment and cleanup costs, Cal/EPA should ensure that Toxics and the State Water Board apply for funding available under the revitalization act.

We conducted this review under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted government auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

Jaine M. Howle

ELAINE M. HOWLE State Auditor

Date: July 22, 2003

Staff: Joanne Quarles, CPA, Audit Principal Theresa Gartner, CPA KC George Ken Louie

## **APPENDIX A**

### TABLE A.1

The Funding Sources, Authorized Uses, and Fund Balances of Accounts Used by Toxics and the State Water Board for Cleanup

						scal Year Fu lars in Thou		
Account Name	Statutory Authority	Funding Sources	Authorized Uses	1998–99	1999– 2000	2000–01	2001–02	2002–03 Estimated
Toxics Accounts								
Toxic Substances Control Account	Health and Safety Code, Section 25173.6(a)	Since fiscal year 1998–99, primary funding sources have been the environmental fee, cost recovery payments from responsible parties, penalty assessments, interest income, and transfers from other accounts. However, state law also allows it to receive legislative appropriations and funds from the federal government under the Superfund law.*	The fund can be used for a variety of purposes that include: the administration and implementation of the state Superfund Program; the administration of its Human and Ecological Risk Division; the Hazardous Materials Laboratory; and the Office of Pollution Prevention and Technology Development; to allocate funds to the Office of Environmental Health Hazard Assessment; to pay its share of cleanup costs under federal Superfund law; to pay for direct site remediation costs; and to pay for Toxics' staff to perform oversight of investigations, characterizations, removals, remediations, or long- term operation and maintenance.	\$4,516	\$12,550	\$24,231†	\$31,586	\$21,945
Illegal Drug Lab Cleanup Account	Health and Safety Code, Sections 11374.5(b)(2) and 25354.5(e)	Since fiscal year 1998–99, the primary source of funding for the account has been interest income. However, state law also allows it to receive transfers from the General Fund and penalty assessments.	To fund necessary removal actions relating to the cleanup of hazardous substances at a site where state or local law enforcement agencies identify the manufacture of any illegal controlled substance.	1,165	3,344 <sup>‡</sup>	7,457 <sup>‡</sup>	7,623‡	5,756
Hazardous Substance Account	Health and Safety Code, Sections 25330 and 25336	Since fiscal year 1998–99, primary sources of funding for this account have been transfers from the Toxic Substances Control Account, penalty assessments, and interest income. However, state law also allows it to receive legislative appropriations.	To repay principal and interest for bonds sold under the Johnston-Filante Hazardous Substance Cleanup Bond Act of 1984. To fund removal or remedial actions for hazardous substance release sites under certain conditions.	3,391	3,533	2,681	3,891	3,706

continued on next page

						scal Year Fu llars in Thou		
Account Name	Statutory Authority	Funding Sources	Authorized Uses	1998–99	1999– 2000	2000-01	2001–02	2002–03 Estimated
Site Operations and Maintenance Account, a subaccount within the Toxic Substances Control Account	Health and Safety Code, Section 25330.5(a)	Since fiscal year 1998–99, the primary source of funding for this account has been interest income. However, state law also allows it to receive legislative appropriations from the Removal and Remedial Action Account, a subaccount of the Toxic Substances Control Account and cost recovery payments from responsible parties, the federal government, and state or local agencies.	To fund operation and maintenance activities at specific sites and administrative costs associated with these activities.	\$2,221	\$2,317	\$ 2,420	\$2,476	\$2,477
Expedited Site Remediation Trust Fund	Health and Safety Code, Section 25399.1	Since fiscal year 1998–99, the account has received appropriations from the Toxic Substances Control Account and interest income.	To pay the orphan share costs of remediation for up to 10 hazardous waste sites accepted into the Expedited Remedial Action Program.	432	876	754	1,499	1,972
Site Remediation Account	Health and Safety Code, Section 25337(a)	Since fiscal year 1998–99, the account has received funding from the Toxic Substances Control Account and interest income.	To fund direct remediation of sites with hazardous materials contamination or the threat of contamination, including payments to contractors. Direct site remediation costs do not include Toxics' administrative expenses or costs for staff to perform their oversight functions.	5,598	6,496	3,130	3,322	1,400
Removal and Remedial Action Account, a subaccount within the Toxic Substances Control Account	Health and Safety Code, Section 25330.4(a)	Since fiscal year 1998–99, the primary sources of funding for this account have been the recovery of costs resulting from settlement agreements and interest income. However, state law also allows it to receive transfers from the General Fund.	To fund direct and administrative costs relating to the removal or remedial actions at specific sites.	775	1,175	5	892	1,109
Cleanup Loans and Environmental Assistance to Neighborhoods Account	Health and Safety Code, Section 25395.20(b)	Since its inception in fiscal year 2000–01, funding sources have been a single transfer from the General Fund and a nominal amount of interest income. State law also allows it to receive proceeds from Ioan repayments and from the sale of property subject to foreclosure.	To provide low-interest loans to fund preliminary endangerment assessments and response actions at brownfields and underutilized properties. Also, to fund other specified activities aimed at stimulating the redevelopment of these properties.	_	_	84,674	1,243	272
Hazardous Substance Cleanup Fund	Health and Safety Code, Section 25385.3(a)	Since fiscal year 1998–99, the account has not received any funding. Its major source of funding was a 1984 general obligation bond issuance under the Johnston-Filante Hazardous Substance Cleanup Bond Act of 1984.	To pay its share of cleanup under federal Superfund law, to pay all costs of cleanup the State or any local agency incurs for state Superfund sites, and to pay for site characterization of a release of hazardous substances.	3,248§	2,723	1,805	1,838	7

						cal Year Fui ars in Thou		
Account Name	Statutory Authority	Funding Sources	Authorized Uses	1998–99	1999– 2000	2000–01	2001–02	2002–03 Estimated
Orphan Share Reimbursement Trust Fund	Health and Safety Code, Section 25390.3	State law requires the Legislature to enact a law to appropriate funds or establish a revenue source before the trust fund can become operative. The Legislature has not enacted state law to appropriate funds or establish a revenue source.	To pay claims for reimbursement of all or a portion of the orphan share at a site paid for by a responsible party, to pay the portion of oversight attributable to the orphan share that Toxics or regional water boards incur, and to pay for their administrative costs. The law excludes certain sites from the claim reimbursement process such as National Priorities List sites.	-	-	-	-	_
State Water Board Accounts	S							
Underground Storage Tank Cleanup Fund	Health and Safety Code, Section 25299.50	Since fiscal year 1998–99, primary funding sources have been regulatory fees and interest income. State law also allows it to receive funding from legislative appropriations, cost recovery payments from responsible parties, and penalty assessments.	To pay for the reasonable and necessary corrective action in response to any unauthorized release of hazardous substances from underground storage tanks. To pay for the oversight costs relating to the cleanup and abatement of unauthorized releases. To pay for claims that owners and operators of underground storage tanks submit for certain costs. To pay for administrative and enforcement costs.	\$68,239	\$96,506	\$102,355	\$125,834 <sup>  </sup>	\$71,095
State Water Pollution Cleanup and Abatement Account, within the State Water Quality Control Fund	Water Code, Section 13440	Since fiscal year 1998–99, primary funding sources have been services income, penalty assessments, and interest income. State law allows it to receive legislative appropriations, contributions, and loans from the State Water Quality Control Fund.	To assist public agencies in cleaning up waste or abating its effects on waters of the State. To assist regional water boards in their attempts to remedy a significant unforeseen water pollution problem or to oversee a supplemental environmental project required as a condition of an order imposing administrative civil liability.	7,258#	2,389	12,573	11,630	17,866

Sources: Governor's Budget for fiscal years 2000-01 through 2003-04; California Health and Safety and California Water codes, as cited.

\* Comprehensive Environmental Response, Compensations and Liability Act.

<sup>†</sup> According to Toxics, the increase in the Toxic Substances Control Account's fund balance is primarily attributable to unspent direct site cleanup monies resulting from the sunset of the state Superfund law for roughly 10 months and reduced expenditures due to the shift of staff to reimbursement funding from school oversight activities. However, Toxics believes that if the current trend of expenditures continues, it will exhaust the fund balance by fiscal year 2005–06.

<sup>‡</sup> Interest income accounts for only 4 percent of the increase in fund balance for the Illegal Drug Lab Cleanup Account. According to Toxics, the rest of the increase is the result of reversions from unspent contracts.

§ Cost recovery from responsible parties of payments made out of the Hazardous Substance Cleanup Fund are deposited into the Hazardous Substance Clearing Account. The Clearing Account is used to pay the principal and interest on the bonds issued pursuant to the Johnston-Filante Hazardous Substance Cleanup Account. Also, the State deposits any moneys it receives from the premiums and accrued interest on these bonds into the Clearing Account.

<sup>11</sup> According to the State Water Board, the increase in the Underground Storage Tank Cleanup Fund is primarily due to unspent funds by project proponents that reverted back to the fund. However, the State Water Board indicates that it requested an increase to its budget authority and has committed all but \$18 million to projects.

<sup>#</sup> These fund balances relate to the State Water Quality Control Fund and can be used for purposes other than those authorized for the State Water Pollution Cleanup and Abatement Account. The Governor's Budget does not provide separate funding information for the Cleanup and Abatement account. The increase for fiscal year 2002–03 in this fund balance is primarily attributable to a penalty assessment of \$20.1 million against a major company.

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# **APPENDIX B**

#### TABLE B.1

## California National Priorities List Sites With a Construction Complete Status

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Site Name	City
Raytheon Corporation	Mountain View
Riverbank Army Ammunition Plant	Riverbank
Sacramento Army Depot	Sacramento
Sola Optical USA, Incorporated	Petaluma
South Bay Asbestos Area	Alviso
Southern California Edison Company	Visalia
Spectra-Physics, Incorporated	Mountain View
Synertek, Incorporated (Building 1)	Santa Clara
Teledyne Semiconductor	Mountain View
TRW Microwave, Incorporated (Building 825)	Sunnyvale
Watkins-Johnson Company (Stewart Division Plant)	Scotts Valley
Western Pacific Railroad Company	Oroville
Westinghouse Electric Corporation	Sunnyvale

Source: U.S. Environmental Protection Agency's Comprehensive Environmental Response, Compensation, and Liability Information System as of April 30, 2003.

Agency's comments provided as text only.

California Environmental Protection Agency 1001 I Street Sacramento, CA 95814

July 8, 2003

Ms. Elaine M. Howle\* State Auditor Bureau of State Audits 555 Capitol Mall, Suite 300 Sacramento, California 95814

Dear Ms. Howle:

The attached documents were drafted in response to Bureau of State Audit's audit of the California Environmental Protection Agency, the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (State Water Board) and the draft copies of your report titled "California Environmental Protection Agency: Insufficient Data Exists on the Number of Abandoned, Idled, or Underused Contaminated Properties, and Liability Concerns and Funding Constraints Can Impede Their Cleanup and Redevelopment."

Please feel free to contact Rick Brausch, Assistant Secretary for Brownfields and Waste Programs, at (916) 445-3131, Dorothy Rice from DTSC, at (916) 323-3577, or Barbara Evoy from the State Water Board, at (916) 341-5632, if you have any questions about the information represented in the attachments.

Sincerely,

(Signed by: Winston H. Hickox)

Winston H. Hickox Agency Secretary

Attachments

<sup>\*</sup> California State Auditor's comments begin on page 57.

#### Cal/EPA COMMENTS ON BUREAU OF STATE AUDIT REPORT TITLED "CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY: INSUFFICIENT DATA EXISTS ON THE NUMBER OF ABANDONED, IDLED, OR UNDERUSED CONTAMINATED PROPERTIES, AND LIABILITY CONCERNS AND FUNDING CONSTRAINTS CAN IMPEDE THEIR CLEANUP AND REDEVELOPMENT."

The following comments were first offered in response to a list of reported brownfields impediments provided by BSA as it was conducting research in preparation for writing its report. Cal/EPA offers these comments again in response to the recommendations in the draft report related to development of databases or comprehensive listings of orphan sites.

#### Impediments imposed by the general lack of information on brownfields:

The Cal/EPA boards and departments involved in brownfields activities (namely DTSC and the Regional Boards) have never created a list of brownfields sites for a variety of reasons. The most significant reason is the tendency for such lists, or a site's presence on such a list, to create a stigma or negative perception of a property. In Cal/EPA's experience, property owners have often objected to labeling or listing because contamination is not confirmed. Another factor to consider is whether Identification of a site as a brownfield offers any type of advantage to either the current owner or the potential buyer. If no such incentive is available, identification as a brownfield is typically not desired.

#### 1. There is no one universally accepted definition of brownfields.

Generally, in California law there is no definition of the term "brownfields." In one instance, under the statute for DTSC's CLEAN Loan Program, there is a description of brownfields that is to be used to target the types of properties to which the loans may be offered. Interestingly, it is not focused on a site's environmental condition. Rather, it focuses on past or present economic activity.

Cal/EPA does not believe that the lack of a definition of brownfields has been an impediment to cleanup or redevelopment. To the contrary, having no definition, or any obligation stemming from a property being designated as such, may in many instances encourage or facilitate property transactions that may not otherwise be pursued (see later discussions related to liability).

# 2. There is no requirement that jurisdictions or property owners identify and disclose information about the existence of brownfields, the extent of their contamination, or potential for reuse.

Property owners are required to disclose property conditions as part of real estate ownership transfers. In addition, most lending institutions require some type of property assessment prior to approving loans for commercial property transactions. This exercising of what is termed "due diligence" typically follows ASTM standards for Phase I and Phase II site assessments. It is true that information gathered in support of property transactions is not required to be disclosed to regulatory agencies or local jurisdictions. While a requirement to report or disclose this type of information to regulatory agencies or local jurisdictions might provide an opportunity to collect this type of information into a single information source, Cal/EPA does not believe that the lack of a reporting mandate is an impediment. Site conditions themselves may deter a possible transaction, but this information is gathered and ultimately reported to the parties to the transaction.

#### 3. There is no state repository of brownfield information such as the number, size, location, ownership, or extent of contamination.

Cal/EPA does not believe that a lack of a state repository for brownfields properties is an impediment (see the general comment above regarding the potential for property stigmatization). There may, however, be benefit to collecting general information related to the scope or magnitude of brownfield sites in California. DTSC and the Regional Boards are taking steps to consolidate information about known contaminated sites and estimating numbers and acreage of brownfield properties to better target their efforts and to estimate future resource needs, as well as to assist local jurisdictions in securing available brownfield resources.

#### DEPARTMENT OF TOXIC SUBSTANCES CONTROL'S (DTSC) COMMENTS ON BUREAU OF STATE AUDIT REPORT TITLED "CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY: INSUFFICIENT DATA EXISTS ON THE NUMBER OF ABANDONED, IDLED, OR UNDERUSED CONTAMINATED PROPERTIES, AND LIABILITY CONCERNS AND FUNDING CONSTRAINTS CAN IMPEDE THEIR CLEANUP AND REDEVELOPMENT."

#### Pages 16-19 of Report:

Section entitled "Although Toxics' Database Can Track Orphan Sites, It Cannot Track Brownfields or Sites With Orphan Shares"

#### **DTSC Comment:**

a. Calsites Database

As discussed in the audit, DTSC maintains the CalSites database as a project management and tracking tool with information on contaminated sites. Since its initial development in 1991, the database has been modified to meet some of the increasing demands for additional information and complex data needs, and to make information available on the Internet. However, due to the limitations in its design, the CalSites system is unable to meet all of the current and anticipated future needs for a fully-integrated, relational data management and geographic information system (GIS).

DTSC is in the planning process to upgrade the CalSites database to address these needs. A first step in the upgrade project will be to use a portion of the U.S. Environmental Protection Agency (U.S. EPA) State and Tribal Response Grant to fund improvements to the system that will maintain and display accurate geographically-referenced information on brownfields sites and other properties that pose environmental concern. Compatibility with existing State Water Resources Control Board (SWRCB) and regional water board databases is a fundamental objective of this effort. In addition to overall enhancements to the data management system, grant funds will also be used to improve and expand the California Environmental Protection Agency (Cal/EPA), DTSC, SWRCB, and regional water board websites to allow access to information about brownfields and other cleanup sites through a single portal. A goal of the CalSites upgrade activities is to make have GIS data accessible on the Cal/EPA website as part of a comprehensive source of brownfield site information. This will help identify and measure successes in ways that would be beneficial to DTSC, Cal/EPA and the Legislature. Future activities by DTSC to upgrade and enhance CalSites will build on these efforts.

b. ERAP

The report contains an error in the number of ERAP sites that are eligible to receive orphan shares (Page 16). We would recommend this be corrected with the following text:

"...the Expedited Remedial Action Program (expedited program) has designated a total of five sites with orphan shares. Three of the sites have had their orphan shares paid and two more sites are still in the remediation process and will receive orphan funding upon certification."

Also on Page 19 in the first new paragraph, "three sites are eligible" should be changed to "three sites have received orphan share funding."

#### Pages 20-22 of Report:

Section titled "Toxics Must Rely More on Fees to Fund Orphan Site Cleanup Efforts"

#### **DTSC Comment:**

a. On page 20, the first sentence is correct in stating that General Fund appropriations for the cleanup of contaminated sites have declined. DTSC has replaced \$4.8 million in General Fund on an annual basis beginning FY 2002-03 with funds from the Toxic Substances Control Account (TSCA) and continually increases the TSCA appropriation by the Consumer Price Index (CPI) for direct site cleanup. In addition, activities formerly funded using General Funds have been shifted to TSCA for orphan oversight. DTSC would recommend the following change to this first sentence on page 20:

"State General Fund appropriations for the cleanup of sites with contamination have significantly declined in the past and current year and have been proposed for elimination in FY 2003-04. The activities formerly funded by General Fund appropriations have been shifted to funding from the Toxic Substances Control Account, which has as its primary funding source the environmental fee."

b. Also for clarification, we recommend the following language for the second sentence in paragraph 2 of page 20:

"Its primary source of funding for cleanup is the Toxic Substances Control Account that has as its primary revenue the environmental fee...." c. On the first line of page 21, there appears to be a typo on the amount of fines. The following correction should be made:

"...by a fine of not less than \$5,000 and up to \$25,000 a day for each violation."

d. On page 21 in the second paragraph, the statements are not accurate. Toxic Substances Control Account revenue has remained relatively stable, but our reliance on the funds for the Site Mitigation and Brownfields Reuse Program has significantly increased. While the \$4.8 million General Fund was a significant contribution, the Toxic Substances Control Account still contributed more than \$2 million, increasing annually with CPI. Beginning in FY 2003-04, the Toxic Substances Control Account to the Site Remediation Account. We would recommend inserting the following text after the words "direct site cleanup costs" on the fourth line down:

"Annual appropriations for direct site cleanup have ranged from \$6,750,000 in 1998-99 to \$7,326,000 in 2001-02. The Toxic Substances Control Account funded the difference between the General Fund contribution and the annual appropriation in the Site Remediation Account. In 2001-02, General Fund totaling \$1.5 million was directly deposited into the Site Remediation Account for direct site cleanup down from the annual \$4.8 million in General Fund used for this purpose. In FY 2002-03, the \$4.8 million has been shifted from General Fund to the Toxic Substances Control Account."

e. Figure 2 following Page 21: The amount for the environmental fee is correct. However, the bars for Penalty Assessments and Interest and Other seem greatly inflated. So either there are errors in the numbers or the table is including "Prior Year Adjustments" in the "Other" column. Prior year typically isn't revenue; it is an encumbrance that did not materialize. Also, the title of the figure "Fund Sources Toxic Uses for Cleanup" should be changed to "Funding Sources for TSCA" to be completely accurate.

#### Pages 22-24 of Report:

Section titled "Funding for Cleanup May Also Come From Federal Sources"

#### **DTSC Comment:**

On page 23, the line beginning with "cleanup of 39 sites" the report uses the term "Hazardous Substance Superfund" in reference to three orphan cleanups. It is not clear whether this is referring to the federal Superfund program.

#### Pages 22-24 of Report:

Section titled "Other States Use a Variety of Methods to Finance the Cleanup of Brownfields and Orphan Sites"

#### **DTSC Comment:**

Table 2 after page 25 includes a line called "legislative appropriations" as one of the sources of funding for orphan sites. However, bonds, General Funds, etc. all are "legislative appropriations" so it is not clear to DTSC what fund source is meant by "legislative appropriations." Without understanding what is meant by this fund source, DTSC cannot determine whether it concurs with all the information in the table.

#### Pages 31-34 of Report:

Section titled "Limited Opportunities Exist for Funding the Cleanup of Brownfields"

#### **DTSC Comment:**

a. Brownfield Grants

DTSC, working with the SWRCB and the Department of Education, submitted an application to the U.S. EPA for a State and Tribal Response Grant for FY 2003-04. The \$1.5 million grant will fund a variety of activities including targeted site assessments, increased program coordination with SWRCB and the regional water boards, database improvements, public outreach activities, and assistance to school districts with brownfields sites.

The audit correctly notes that DTSC did not apply for two other U.S. EPA site-specific brownfield assessment and cleanup grants for FY 2003-04. These grants would require additional staffing to manage and perform the required activities. DTSC determined that it did not have staff resources, nor the ability to add staff, to perform the tasks. In addition, our preliminary discussions with U.S. EPA Region IX, as well as U.S. EPA's awarding of similar grants in previous years, led us to the understanding that funding for California would be directed toward local jurisdictions. That's why DTSC joined Cal/EPA, SWRCB and the regional water boards in supporting more than 55 communities in their application for these grants. DTSC also provided some of the applicants with technical assistance on their project proposals, and hosted informational workshops on the grant process. On June 20, 2003, U.S. EPA awarded brownfield assessment and cleanup grants to 18 local governments and non-profit organizations in California, totaling more than \$6 million. This represents more awards than any other state received in this funding cycle and, combined with the State and Tribal Response Grant, will provide over \$7.5 million in FY 2003-04 to support the redevelopment and reuse of brownfields throughout California. These funds will support environmental site assessment and cleanup activities at brownfields projects, and will further the overall goal of the state to return these properties to productive use, create new jobs and protect environmental quality.

It should be noted that California's \$1.5 million State and Tribal Response Grant for FY 2003-04 includes funding that will enable DTSC to provide support for local agencies and non-profit organizations that have received grants from U.S. EPA. Using these resources, DTSC will provide technical and regulatory assistance for brownfields projects, including many of the 18 projects which have just been awarded U.S. EPA assessment and cleanup grants. These funds will help strengthen the state-local partnership that is an important component of success in brownfields redevelopment projects.

The audit also references a \$1 million grant that is available to state and local entities for the direct remediation of brownfield sites and recommends that DTSC could benefit from this grant for a site that it owns. This statement may refer to the Stringfellow site. However, because this site is a National Priorities List site, it would not be eligible for this grant. In addition, the State of California is a responsible party for the project, but does not own the site and would also not be eligible based on that factor.

DTSC intends to continue its strong commitment to brownfields redevelopment activities using available resources, including the U.S. EPA State and Tribal Response Grant. In addition, DTSC will continue to pursue grants and other funding when it is cost effective to do so and when such grants match the priorities identified by the Legislature and the Administration.

b. On page 32, in first new paragraph, the amount reflected for the CLEAN program is not correct. After the State transferred back to the General Fund \$77 million of the \$85 million, the remaining balance for the program was \$8 million, not \$1.2 million.

#### Appendix A of Report

#### DTSC Comment:

a. HSA funding source: While technically HSA can be used for anything in Article 7.5 (e.g., bond statutes), it may be misleading to say that it can be used for removal and remedial actions since DTSC has no intention to use it for that purpose and in fact wouldn't have enough money in the account to fund one year's worth of site remediation activities. We would recommend a footnote to indicate that, at this point, DTSC's only plans for the money in HSA is to pay off the bonds.

b. ERAP: The funding source should be identified as "transfers" rather than "appropriations."

c. SRA section should be rewritten for clarification:

"Since fiscal year 1998-99, the account has received funding from the Toxic Substances Control Account, including the General Fund monies deposited into the Toxic Substances Control Account."

d. Rewrite the footnote on: TSCA as follows:

"According to Toxics, the increase in the Toxic Substances Control Account's fund balances is primarily attributable to unspent direct site cleanup monies resulting from the sunset of the State's Superfund law for roughly ten months and "reduced expenditures" in the Toxic Substances Control Account due to the shift of staff to reimbursement funding from school oversight activities. However, Toxics believes that if the current trend of expenditures continues, it will exhaust the fund balance by fiscal year 2005-06."

#### STATE WATER RESOURCES CONTROL BOARD (STATE WATER BOARD) COMMENTS ON BUREAU OF STATE AUDIT REPORT TITLED "CALIFORNIA ENVIRONMENTAL PROTEC-TION AGENCY: INSUFFICIENT DATA EXISTS ON THE NUMBER OF ABANDONED, IDLED, OR UNDERUSED CONTAMINATED PROPERTIES, AND LIABILITY CONCERNS AND FUNDING CONSTRAINTS CAN IMPEDE THEIR CLEANUP AND REDEVELOPMENT."

#### Page 15: **Report Statement:**

"... the State Water Board did report to us that it has only seven orphan sites."

#### State Water Board Comment:

We reported far more than seven sites; however, a determination of viable responsible parties for the EAR sites could not be determined based on the information available. Regional boards are aware of orphan sites in the SLIC Program and elsewhere, but there are currently no means of identifying or culling that information from the existing databases. Also, as reported elsewhere in the auditor's draft report, NPL sites were removed from the list.

#### Page 16: **Report Statement:**

"These codes could be a valuable tool for the State Water Board to easily identify orphan sites."

#### State Water Board Comment:

The word "easily" in the sentence may lead a reader to believe the Water Board could easily find and enter the information. This is not the case. Updating the Geotracker records would require additional personnel for an extended period.

#### Page 29: Report Statement:

"The State Water Board told us that it has seven orphan sites."

#### State Water Board Comment:

We did not provide a number to the auditor. We supplied the auditor with information on sites that could fit an orphan profile, but that number could not be confirmed. It appears that in cases where there was not backup documentation, the auditor chose to not include the remainder of the 155 site names provided (see attached spreadsheet).

#### Page 29: Report Statement:

"Thus, by not applying [for a grant], the State Water Board is missing an opportunity to receive funding that could supplement its efforts to remediate orphan sites."

#### State Water Board Comment:

The State Water Board must always assess the benefit of applying for grants where the available grant funds may not be worth the effort to apply, or may result in costs to the State Water Board and Regional Boards that exceed the available grant funds. In addition, in light of ongoing hiring freezes, limited available funds cannot be used necessary staff to oversee assessment and cleanup activities.

						ORP	ORPHANS SITES / MINES	<b>AINES</b>	
Site Name	Location Region	Location (City or County)	Approved Date	Approved Amount	Problem Addressed Status	Cleaned Up?	Amount Remaining	Orphan Site?	If Orphan Site, Other Participating in Cleanup
Gambonini Mercury Mine Sediment Control	0	Marin County	January-95	\$971,300	Active	Yes	\$105,036	Yes	Mined in 1970's. Owner was senile and unable to pay, so site was cleaned up under EPA's CERCLA Program and supplemented by SWRCB CAA funds. San Francisco Regional Board monitoring site.
Iron Mountain Mine	ъ	Shasta	Mid-1980's	\$1,536,000	Active	Ongoing	\$1,490,341	Yes	Mined in early 20th century. Owner unable to pay, so site is being cleaned up via EPA's Superfund program. EPA reached a settlement with Zeneca Co. to cover costs. Pollution control and monitoring will continue into perpetuity
Penn Mine	2	Calaveres County	February-94	\$7,675,000	Active	Yes	\$1,156,976	Yes	Mined in early 20th century. Site property abandoned except portion owned by EBMUD (acquired via condemnation). Restoration costs split between EBMDU and SWRCB. Site will be maintained and monitored into perpetuity.
Walker Mine Pollution Abatement	5	Plumas County	February-91	\$1,700,000	Active	Yes	\$613,526	Yes	Mined in early 20th century. Site recently sold to private party, but party has not provided abatement funds to our knowledge. Regional Board responsible for mine seal and recent drainage control projects and will maintain site into perpetuity.
Leviathan Mine	9	Markleeville	September-93	\$3,354,768	Active	ø	\$2,593,234	No	Mined in mid-20th century. Site owned by State. Abatement work at site is ongoing; funds may be recovered from ARCO, a potential RP
		San Luic							Minod in mid-20th conture. Drivete Ouncer unwilling to now those may be concerned literation to red runner to
Buena Vista	2	San Luis Obispo	N/A	N/A	Active	g		No	wined in mo-zum century. Frivate Owner unwining to pay, mere may be origoing ingation to get owner to pay. USEPA performed abatement work
Afterthought	2	Shasta	N/A	N/A	Active	No		No	Mined in early 20th century. Site privately held and subject to several administrative actions by Regional Board. Development company that owns site has applied for grants to clean up site. No state funds have been spent abating site
Boston	5	Nevada	N/A	N/A	Active	No		No	Mined in the late 19th century. Site owned by Bureau of Land Management and a private party. No state funds have been spent abating site
Brush Creek	5	Sierra	N/A	N/A	Active	No		No	Mined in late 1980s. Site owned by US Forest Service. Operator abandoned site and recovered reclama- tion bond without reclaiming the site. No state funds have been spent abating site.
Copperopolis	5	Calaveras	N/A	N/A	Active	No		Undeter- mined	Mined in early 20th century. Site privately held. Regulatory efforts just beginning. Regional Board is trying to find RP. No state funds have been spent abating site.
East Shasta	5	Shasta	N/A	N/A	Active	No		No	Mined in early 20th century. Site privately owned. Regional Board is trying to find RP.No state funds have been spent abating site.
Gardners Point	5	Sierra	N/A	N/A	Active	No		Yes	Mined in the 1980's. Private property that may be abandoned. Operator abandoned the site without performing reclamation and is now believed to be living out-of-state. No state funds have been spent abating site.
Jamestown	5	Tuolumne	N/A	N/A	Active	No		Yes	Mined in the late 1980's and early 1990's by a Canadian company which is now dissolved. County released site reclamation bond even though site had not been fully reclaimed. No state funds have been spent abating site.
Liberty Hill	5	Nevada	N/A	N/A	Active	No		No	Mined in the late 1980's and early 1990's. Claimant/operator never applied for funding and is is late stages of Alzheimer's. Site is now abandoned. U.S. Forest is now owner and is exploring cleanup options. No state funds have been spent abaing site.
New Idria	5	San Benito	N/A	N/A	Active	N N		Yes	Last mined in early 1970s. Site is privately owned and operating as an illegal hazardous waste dump. No state funds have been spent abaing the site.

Site Name	Location Region	Location (City or County)	Approved Date	Approved Amount	Problem Addressed Status	Cleaned Up?	Amount Remaining	Orphan Site?	If Orphan Site, Other Parties Participating in Cleanup
Newton	5	Amador	N/A	N/A	Active	No		N	Mined in early 20th century. Site is privately owned and subject to enforcement. Regional Board is going after property owner who inherited the land, but never mined it. No state funds have been spent abating the site.
Pioneer	5	Sierra	N/A	N/A	Active	No		Yes	Mined in the 1980s. Private property that may be abandoned. Operator abandoned the site without performing reclamation and is now believed to be living out-of-state. No state funds have been spent abating site.
Polar Star	5	Placer	N/A	N/A	Active	Yes		No	Mined in late 19th century. Site is privately owned and was cleaned up by USEPA under CERCLA because of mercury health hazard. Cost recovery efforts now in progress. No state funds have been spent abating site.
Sulfur Bank	5	Lake ?	N/A	N/A	Active	Q		Yes	Last mined in early 20th century. Private property likely abandoned. Ongoing USEPA Superfund cleanup project.
West Shasta	5	Shasta	N/A	N/A	Active	No		No	Mined in early 20th century. Several sites are being cleaned up as a result of a settlement under the direc- tion of the Regional Board. No state funds have been spent abating site.
Zaca	6	Alpine	N/A	N/A	Active	No		No	Mined in early 20th century. Site is on Federal land and the Forest Service is working with Lahontan Regional Board to clean up site under CERCLA. No state funds have been spent abating site.
				\$15,237,068					

ORPHA	ORPHAN SITES / CAA	CAA						
Site Name	Location Region	Location (City or County)	Approved Date	Approved Amount	Cleaned Up?	Orphan Site?	If Orphan Site, Other Partics Participating in Cleanup	Remarks
Abatement of Public Heatth Exposures	-	Santa Rosa	September-98	\$250,000	N/A	N/A		Funds used to hook-up low-income residents to City Water supply because of contaminants in groundwater originating from industrial activities along Sebastopol Road in Santa Rosa
Baechtel Grove MS, Blosser, etal - Site Investigation	-	Willits	July-01	\$22,000	N/A	N/A		Investigation project - no evidence of contamination present
Big Creek Diesel Oil Spill Cleanup - Hayfork - Fish & Game	Ļ	Hayfork-Trinity County	September-94	\$10,000	Yes	No		RP determined insolvent
Cream's Auto Wreckers - Research of Waste Discharge	-	Santa Rosa	April-94	\$6,700	Research Completed	٩		Emergency functing to research the discharge of hazardous waste that threatened surface waters of Windsor Creek. Auto Wrecker suspected to be RP.Wrecker's.
Davenport Marine - Removal of Barrels	-	Eureka	December-94	\$45,000	Ongoing	No		RP is unwilling or unable to pay; Regional Board issuing CAA order
Elphick and Witter Roads - Well Contamination, Sonoma Co.	ļ	Sonoma County	March-02	\$97,250	Ongoing	Yes	None	Investigation is ongoing to identify RP
Humboldt Rose Diesel Spill	۰	Humboldt County	November-99	\$50,000	Yes	No		CAA Order issued against RP
Santa Rosa Asti Site	Ļ	Santa Rosa	June-99	\$6,000	N/A	N/A		Emergency funds to conduct groundwater sampling in domestic wells in Santa Ross area.
Santa Rosa Drinking Water Well Contamination	-	Santa Rosa	October-99	\$266,250	Completed	No		Emergency funds to hook-up homes/businesses to City water. Investigation by RB1 determined source and RP
Third Street Culvert Project - Cap Two Wells	ł	Santa Rosa	June-95	\$2,000	Completed	N/A	N/A	Final report dated 11/27/95. Funds used for abandonment of two damaged monitoring wells
West College Avenue Well Contamination	-	Santa Rosa	August-00	\$939,000	Ongoing	No		
Methodist Church - Cleanup of Oil Product, Oakland	2	Oakland	January-95	\$15,000	Yes	No		Property owner may be RP; Regional Board pursuing cost recovery
Gaviota Creek Cleanup - Fish & Game	ε	Santa Barbara	October-93	\$10,000	Yes	٥		Per final report, RP is being investigated
								D
Newhall Fire Cleanup - Fish and Game,	4	Newhall	September-98	\$50,000	Yes	No		Per mai report, Hish & Game is crating report to be submitted to LAS office for consideration for charges against operator and/or landowner
Butte County SA 114 - Demonstration Project, Reso. 94-46	5	Butte County	May-94	\$15,000	N/A	N/A		Funds for demonstration project to test feasibility/effectiveness of retrofitting septic tanks with recirculating trickling filters for nitrogen removal
City of Corning - Wellhead Treatment	5	Corning	March-02	\$8,000	N/A	N/A		Emergency funding to provide additional sampling, additional bottled water and replacement of filters on existing well-head treatment units.
City of Roseville Fire Department - Hydraulic sump cleanup	5	Roseville	January-97	\$4,000	Yes	No		Emergency funding for removal and disposal of hydraulic lift sump at abandoned service station in Roseville; RP claims inability to pay for cleanup
City of Turlock - Oversight of Removal of PCE Pollution	£	Turlock	November-94	\$46,750	Ongoing	No		City undertaking investigation and remediation per settlement agreement with State Board. SWRCB providing oversight. Time extension until June 2005 approved for groundwater management plan implementation.
Downtown Dry Cleaners - City of Turlock Groundwater Monitoring Study	5	Turlock	July-02	\$136,000	Study Completed	Yes	City of Turlock - estimated \$1.7M	Funds for groundwater monitoring study
Dudley and Petty Truck Stop	S	Corning	August-99	\$667,000	Investigation Ongoing	See Remarks		Site investigation ongoing; property may have prospective buyer to take over investigation and cleanup.
Funds to Study and Monitor Inactive AMD	5	Lake County	August-97	\$90,000	N/A	N/A		Funds from Consent Judgement to be used for monitoring and studying abandoned or inactive mine discharges in watersheds leading to San Francisco Bay

Site Name	Location Region	Location (City or County)	Approved Date	Approved Amount	Cleaned Up?	Orphan Site?	If Orphan Site, Other Parties Participating in	Remarks
Geothermal Inc. Butts Canyon Activity	2	Lake County	January-93	\$15,813	No	٩	Occurrent	Funds for cleanup have been directly collected from property owner. No cleanup can be completed until potential responsible parties complete site closure.
Willow Creek, Reso. 94-53 - Restoration Activities	2	Plumas County	June-94	\$50,000	Restoration Completed	Yes	U.S. Forest Service - \$55K	Funds for restoration activities to arrest channel erosion, restope and revegetate stream banks. No RP has been identified because problems in Creek were caused by variety of factors not all understood.
Yolo County Environmental Health Pickup 55-gal drum	ъ	Yolo County	December-95	\$1,600	Yes	Yes	None	Emergency funds to remove 55-gal containing hazardous waste material illegally dumped in Yolo Co. Responsible party and property owner both unknown.
Beacon Station	Q	South Lake Tahoe	December-98	\$20,000	Monitoring Ongoing	Yes	SWRCB - EAR Account	RP is unwilling or unable to pay for cleanup actions; monitoring well sampling on quarterly basis
Matching Funds for Soil Remediation & Revegetation	9	Markleeville	November-97	\$64,800		No		SWRCB is RP for site. Revegetation efforts to prevent erosion of mine spoil sediments and AMD into local waters
Old Stage Mobile Home Park - PCE Contamination	9	South Lake Tahoe	May-01	\$1,071	N/A	N/A		CAA tunds never used for project. Drinking well that RB had hoped to sample had already been destroyed.
South Lake Tahoe "Y" Investigation	Q	South Lake Tahoe	May-92	\$120,000	Investigation Ongoing	No		Investigation of PCE source areas; several potential RP's now required to conduct investigations to determine whether properties are sources of contamination.
Walker River Fuel Spill	9	Mono County	January-01	\$10,000	Yes	No		RP assisted in monitoring and cleanup efforts.
Chino Hills Oil Spill Cleanup - Fish & Game	8	Chino	March-94	\$100,000	Yes	No		RP unwilling to pay; complaint filed with DA's Office
Mead Valley Manure Removal	8	Riverside	February-00	\$36,000	Yes	No		CAA Order issued against RP; was not complied with; CAA funded removal; judgement filed with court to collect penalty against RP
Microbial Contamination Study - Huntington Beach	8	Huntington Beach	October-00	\$200,000	N/A	N/A		Study to investigate possible sources of microbial contamination in Huntington Beach
NORCO Delivery Service - Ground Water Monitoring	8	Anaheim	October-94	\$35,000	No	No		RP is currently conducting additional groundwater investigation
Orange County - Seal Black Co. Cleanup, Reso. 94-6	ω	Garden Grove	January-94	\$70,122	Yes	No		RP was billed by Orange County for incurred costs, but costs were not paid. Orange Co. applied to CAA for funding. Board Resolution stated that recovery of funds from RP was unlikely.
Rialto, Colton, Chino - Effects of Percholorate Pollution on Water Supply	ω	San Bernardino County	November-02	\$3,000,000	Ongoing	No		Emergency funding for wellhead treatment to abate effects of perchlorate pollution in water supply wells in Flatto, Cotton and Chino groundwater subbasins. CAA Orders have been issued to discharges suspected of contributing to pollution.
Riverside Co - Cleanup of Drug Lab Debris	ω	Riverside	December-93	\$28,543	Yes	Yes	Inland Empire Drug Task Force - Amount unknown. Remaining wastes were ineligible for Dept of Justice funding criteria.	Emergency funding for removal/disposal of waste and contaminated soils that were result of illegal drug manufacturing. RP was financially unable to clean up site.;
San Bernardino County - Geophysical Site Investigation	œ	San Bernardino County	May-98	\$1,000	Completed	N/A		Site Investigation project
				\$6,489,899				
= Sites not related to cleanup.								

				ö	ORPHAN SITES / EAR		
Site Name	Region	Location (City or County)	Approved Date	Approved Amount	Cleaned Up?	Orphan Site?	If Orphan Site, Other Parties Participating in Cleanup
Rio Dell Mini-Mart (EAR #1)	-	Rio Dell CA	October-91	\$281,000	Tanks Removed & Some Site Remediation.	Yes	EAR case closed in 1994.
Lorenzo's Gas & Grocery (EAR #5)	-	Ferndale, CA	June-93	\$154,664	Emergency Funding	No	EAR case closed in 1994. FEMA also supplied funding.
Greenspot (EAR #6)	-	Greenview CA	June-93	\$200,000	No EAR funds were expended.	No	EAR case closed in 1994. RP applied to Cleanup Fund (#12655).
John Riddell (EAR #13)	-	Sebastopol CA	August-94	\$200,000	No EAR funds were expended.	No	EAR case closed in 1994. RP applied to Cleanup Fund (#3423).
Orick Presbyterian Church (EAR #58)	-	Orick CA	July-02	\$50,000	No EAR funds were expended.	No	EAR case closed in 2003. RP applied to Cleanup Fund (#16355).
Dointroo Convoch (EA D #1)	·	No Dotolumo OA	Auduct-02		Fan a constant. F. radia c	Z	EAD according 1004 DD acciliadate Channes Friend (#7074)
Moleo Oil (EAB #16)	4 C	Supposed CA	Marton	#100,000 \$225,000	Emergency runaing No EAD fundo word ownood od	Indotorminod	EAD Case Closed II 1394. The applied to Clearing Furity (#7071). EAD 2020 Abroad in 1005
B & K Deliverv (EAB #27)	1 0	Union City CA	Julv-98	\$300.000	No EAN IULUS WELE EXPERIMEN.	Undetermined	EAR case closed in 2001
L & M Automotive (EAR #44)	~	Fremont CA	July-00	-	00 N	Undetermined	Site is still participating in EAR Account.
Orcutt Site (EAR #7)	с	Orcutt CA	June-93	\$110,000	Unknown	Undetermined	EAR case closed in 1994. RP applied to Cleanup Fund (#10582).
H & H Bottling (EAR #11)	m	Watsonville CA	January-94	\$450,000	Site remediation performed while in EAR Account.	N	Site sold to new RP in 1996. EAR case closed in 1996.
Family Market (EAR #33)	e	Salinas CA	July-99	\$100,000	No EAR funds were expended.	Undetermined	Unknown - EAR case closed in 1999.
Elkhorn Superette (EAR #34)	3	Castroville CA	July-99	\$300,000	No EAR funds were expended.	Undetermined	Unknown - EAR case closed in 2001.
Salinas Air Service (EAR #35)	3	Salinas CA	July-99	\$100,000	No EAR funds were expended.	Undetermined	Unknown - EAR case closed in 1999.
Pajaro Beacon (EAR #36)	e	Watsonville CA	July-99	\$300,000	No	Undetermined	Site is still participating in EAR Account.
Venture Oil Company (EAR #45)	e	Watsonville CA	July-00	\$200,000	No	Undetermined	Site is still participating in EAR Account.
Chuck's Exxon (EAR #46)	3	San Ardo CA	July-00	\$100,000	No EAR funds were expended.	No	EAR case closed in 2000. RP is pulling tanks.
Somis Supply (EAR #37)	4	Somis CA	July-99	\$200,000	No EAR funds were expended.	Undetermined	EAR case closed in 1999.
Carmona Auto Service (EAR #57)	4	Oxnard CA	April-02	\$100,000	No	Undetermined	Site is still participating in EAR Account.
Former Mobil Service Station (EAR #59)	4	San Pedro CA	July-02	\$150,000	No	Undetermined	Site is still participating in EAR Account.
Sunco Equipment Company (EAR #60)	4	Santa Fe Springs CA	July-02	\$50,000	No	Undetermined	Site is still participating in EAR Account.
Nelson Property (EAR #8)	5	Marysville CA	June-93	\$1,305,000	No	Yes	Site is still participating in EAR Account. Site has sold numerous times. One RP applied to Clearup Fund (#12288).
Village Market (EAR #12)	5	Tulare CA	May-94	\$300,000	No	No	EAR case closed in 1997.
Livingston By-Pass (Caltrans Proj) (EAR #14)	5	Livingston CA	August-94	\$200,000	No EAR funds were expended.	No	EAR case closed in 1994. RP applied to Cleanup Fund (#9725 & 9877). Also site received Caltrans funding.
Vern's Groveland Chevron (EAR #15)	5	Groveland CA	March-95	\$100,000	Unknown	Undetermined	EAR case closed in 1999.
Three Star Gas (EAR #17)	5	Modesto CA	May-95	\$700,000	No	Undetermined	Site is still participating in EAR Account.
Sacramento Generator (EAR #18)	5	West Sacramento CA	May-95	\$1,100,000	No	Undetermined	Site is still participating in EAR Account.

Site Name	Region	Location (City or County)	Approved Date	Approved Amount	Cleaned Up?	Orphan Site?	If Orphan Site, Other Parties Participating in Cleanup
J. H. Griffin / Marler Industries (EAR #20)	5	Stockton CA	May-96	\$25,000	Tanks removed & Soil Excavated	Undetermined	EAR case closed in 1997. Property owned by Bank.
Fernandes Speed Shop (EAR #21)	5	Turlock CA	July-96	\$550,000	No	Undetermined	Site is still participating in EAR Account.
Lee Cairney (EAR #23)	5	Roseville CA	July-97	\$300,000	No EAR funds were expended.	Undetermined	EAR case closed in 1997. RP referred to Cleanup and Abatement Account.
Joseph Newfield III (EAR #24)	5	Lodi CA	July-97	\$200,000	No EAR funds were expended.	Undetermined	EAR case closed in 1997. RP applied to Cleanup Fund (#12850).
Siebold Corporation EAR #25)	5	Stockton CA	July-97	\$400,000	No EAR funds were expended.	Undetermined	EAR case closed in 1998.
Poor Boys (EAR #26)	5	Lincoln CA	July-98	\$800,000	Tanks removed & Site Remediation Performed	Undetermined	EAR case closed in 2002.
Former T & T Arco (EAR #28)	5	Modesto CA	July-98	\$450,000	No	Undetermined	Site is still participating in EAR Account.
Grischott Brothers (EAR #29)	ß	Westley CA	July-98	\$400,000 Unknown	Unknown	No	EAR case closed in 1998. RP applied to Cleanup Fund (#13875).
Glennville Shopping Center (EAR #32)	5	Glennville CA	August-98	\$3,150,000	No	Undetermined	Site is still participating in EAR Account. RB was also given \$600k in settlement funds.
Betco Petroleum (EAR #38)	5	Turlock CA	July-99	\$300,000	No	Undetermined	Site is still participating in EAR Account.
Former Jones Rest Home (EAR #39)	5	Yuba City CA	July-99	\$420,000	Emergency funding	Undetermined	Site is still participating in EAR Account.
Hang Town Creek (EAR #42)	5	Placerville CA	June-99	\$95,000	Emergency funding	No	EAR case closed in 1999. RP applied to Cleanup Fund (#14423).
Beacon Fuel Star (EAR #43)	5	Quincy CA	October-99	\$100,000	Emergency funding	No	EAR case closed in 2000. RP applied to Cleanup Fund (#14946).
Lakeview (EAR #48)	5	Clearlake CA	June-02	\$100,000	Emergency funding	Undetermined	EAR case closed in 2003.
George Road Site (EAR #49)	5	Lakeport CA	June-02	\$100,000	Emergency funding	Undetermined	Site is still participating in EAR Account.
Guy Meyers (EAR #50)	5	Valley Springs CA	July-01	\$150,000	No	Undetermined	Site is still participating in EAR Account.
Club Paradiso (EAR #51)	5	Valley Springs CA	July-01	\$150,000	No	Undetermined	Site is still participating in EAR Account.
Montgomery Wards (EAR #52)	5	Sacramento CA	July-01	\$100,000	No EAR funds were expended.	Undetermined	EAR case closed in 2001.
Goodrich Oil Company (EAR #53)	5	Turlock CA	July-01	\$100,000	No	Undetermined	Site is still participating in EAR Account.
Anderson Property (EAR #54)	5	Turlock CA	July-01	\$100,000	No	Undetermined	Site is still participating in EAR Account.
Save Center #1 (EAR #61)	5	Atwater CA	July-02	\$50,000	No	Undetermined	Site is still participating in EAR Account.
Save Center #2 (EAR #62)	5	Atwater CA	July-02	\$50,000	No	Undetermined	Site is still participating in EAR Account.
Save Center #3 (EAR #63)	5	Merced CA	July-02	\$100,000	No	Undetermined	Site is still participating in EAR Account.
Applegate Mini-Mart (EAR #64)	5	Atwater CA	July-02	\$100,000	No	Undetermined	Site is still participating in EAR Account.
Armour Petroleum Company / Gas (EAR #83)	5	Davis CA	July-02	\$50,000	No	Undetermined	Site is still participating in EAR Account.
Yermo Truck Stop (EAR #9)	9	Yermo CA	June-93	\$1,143,000	No	Undetermined	Site is still participating in EAR Account. Site also used Cleanup and Abatement Account funds.
Taylor's Tire Facility (EAR #10)	9	Truckee CA	June-93	\$380,000 Unknown	Unknown	No	EAR case closed in 1999. RP applied to Cleanup Fund (#6398).
Bridgeport Shell Station (EAR #22)	9	Bridgeport CA	July-96	\$200,000	No EAR funds were expended.	Undetermined	EAR case closed in 1996.
Gas and Go (EAR #30)	9	Bridgeport CA	July-98	\$100,000	No EAR funds were expended.	Undetermined	EAR case closed in 1998.

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continued on next page

Bit Manual Salator (Erd Nat)         I al Manual Salator (Erd Nat)         I Monter (Erd Nat) <th>Site Name</th> <th>Region</th> <th>Location (City or County)</th> <th>Approved Date</th> <th>Approved Amount</th> <th>Cleaned Up?</th> <th>Orphan Site?</th> <th>If Orphan Site, Other Parties Participating in Cleanup</th>	Site Name	Region	Location (City or County)	Approved Date	Approved Amount	Cleaned Up?	Orphan Site?	If Orphan Site, Other Parties Participating in Cleanup
6         8         cudaterfance.CA         July-GB         S2:00:000         No         No           66         5         cudaterfance.CA         July-GB         S5:00:00         No         Undermined         No           68         6         Bater.CA         July-GB         S5:00:00         No         Undermined         Undermined           69         6         Bater.CA         July-GB         S5:00:00         No         Undermined           69         6         Bater.CA         July-GB         S5:00:00         No         Undermined           69         6         Deget.CA         July-GB         S5:00:00         No         No         Undermined           60         16         Costende.CA         July-GB         S5:00:00         No         No         Undermined           61         16         No         No         S5:00:00         No         No         Undermined           7         10         No         S5:00:00         No         No         No         No           7         10         No         S5:00:00         No         No         No         No           8         No         10         S5:00:00 <t< td=""><td>Beacon Gas Station (EAR #31)</td><td>9</td><td>Meyers CA</td><td>July-98</td><td>\$1,600,000</td><td>No</td><td>Undetermined</td><td>Site is still participating in EAR Account. Site also received funding from the Cleanup and Abatement Account and the Cleanup Fund (#11777).</td></t<>	Beacon Gas Station (EAR #31)	9	Meyers CA	July-98	\$1,600,000	No	Undetermined	Site is still participating in EAR Account. Site also received funding from the Cleanup and Abatement Account and the Cleanup Fund (#11777).
(66)         (6)         (6)         (10)         (	Tahoe Tom's Gas (EAR #40)	9	So Lake Tahoe CA	July-99		No	No	EAR case closed in 2000. RP applied to Cleanup Fund (#1422).
6         BakerCA         July-02         \$\$50.00         No         No determined         Undetermined           66         Bastor CA         July-02         \$\$50.00         No         No         Undetermined           9)         6         Bastor CA         July-02         \$\$50.00         No         Undetermined           9)         6         Bastor CA         July-02         \$\$50.00         No         Undetermined           9)         6         No         July-02         \$\$50.00         No         Undetermined           1         6         No         July-02         \$\$50.00         No         Undetermined           1         6         No         July-02         \$\$50.00         No         No         No           1         6         No         July-02         \$\$50.00         No         No         No           1         1         Refery Syntycy         July-02         \$\$50.00         No         No         No           1         7         Byrner CA         July-02         \$\$50.00         No         No         No           1         7         Byrner CA         July-02         \$\$50.00         No         No <td>Swiss Mart Gas Station (EAR #65)</td> <td>9</td> <td>South Lake Tahoe CA</td> <td>July-02</td> <td></td> <td>No</td> <td>No</td> <td>Site is still participating in EAR Account. Also was in Cleanup Fund.</td>	Swiss Mart Gas Station (EAR #65)	9	South Lake Tahoe CA	July-02		No	No	Site is still participating in EAR Account. Also was in Cleanup Fund.
6         BastourCA         Juyde         S50,000         No         No         Undetermined           66)         6         BagearLakeCA         Juyde         \$\$50,000         No         No         Undetermined           9)         6         Cestine CA         Juyde         \$\$50,000         No         No         Undetermined           9)         6         DaggatCA         Juyde         \$\$50,000         No         No         Undetermined           1         6         NowBerrySpring CA         Juyde         \$\$50,000         No         No         Undetermined           1         6         NowBerrySpring CA         Juyde         \$\$50,000         No         No         No           1         6         NowBerrySpring CA         Juyde         \$\$50,000         No         No         No           1         Bythe CA         Juyde         \$\$50,000         No         No         No         No           1         Pathemical         Juyde         \$\$50,000         No         No         No         No           1         Pathemical         Juyde         \$\$50,000         No         No         No         No           1         Fesex CA<	Halloran Springs (EAR #66)	9	Baker CA	July-02		No	Undetermined	Site is still participating in EAR Account.
680         6 B g Bger Lake CA         July-C2         \$\$30,000         No         No         No           90         6 Cestifice CA         July-C2         \$\$30,000         No	Stop N Save (EAR #67)	9	Barstow CA	July-02		No	Undetermined	Site is still participating in EAR Account.
9)         6         Creatine CA         July-Q2         S50.000         Non-         Undetermined           1         6         DaggetCA         July-Q2         S50.000         No. CAR funds were expended.         Undetermined           1         6         DaggetCA         July-Q2         S50.000         No. CAR funds were expended.         Undetermined           1         1         No. Cararde CA         July-Q2         S50.000         No. CAR funds were expended.         Undetermined           1         1         No.         S50.000         No.         No.         No.           1         1         N	Roman's Construction (EAR #68)	9	Big Bear Lake CA	July-02	\$50,000	No	Undetermined	Site is still participating in EAR Account.
6         Degett A.         July-02         S50.00         Not         Undetermined           7         6         NevBerry Springs CA         July-02         \$50.00         No EAR funds were expended.         Undetermined           7         6         Or Grande CA         July-02         \$50.00         No         Undetermined           7         8         Verno CA         July-02         \$50.00         No         Undetermined           7         8         Verno CA         July-02         \$50.00         No         Undetermined           7         8         Verno CA         July-02         \$50.00         No         No         No           6         7         Bythe CA         July-02         \$50.00         No         No         No           7         Bythe CA         July-02         Sto0.00         No         No         No           7         Essex CA         July-02         Sto0.00         No         No         No           8         Arathem CA         July-02         Sto0.00         No         No         No           9         Arathem CA         July-02         Sto0.00         No         No         No           9	East West Self Serve (EAR #69)	9	Crestline CA	July-02		No	Undetermined	Site is still participating in EAR Account.
6         NewBerry Springs CA         UnyOde         S50.000         No EAR thurds were expended.         Undetermined           1         6         Oro GrandeCA         Uky-02         \$50.000         No         Undetermined           1         1         NemoCA         Uky-02         \$50.000         No         Undetermined           1         1         NemoCA         Uky-02         \$50.000         No         Undetermined           1         1         No         No         No         No         No         No           1         1         No         No         No         No         No         No         No           1         1         No         No         No         No         No         No         No           1         1         No         No         No         No         No         No         No           1         1         No         No         No         No         No         No         No         No           1         No	Daggett Oil (EAR #70)	9	Daggett CA	July-02		No	Undetermined	Site is still participating in EAR Account.
()         (c)	Newberry Market (EAR #71)	9	NewBerry Springs CA	July-02	\$50,000	No EAR funds were expended.	Undetermined	EAR case closed in 2003.
1         6         Vermo CA         JUIV-G2         \$50,000         No         Undetermined           R#3)         7         Byrthe CA         JUIV-33         \$100,000         Emergency funding         No         No           EM#74)         7         Byrthe CA         JUIV-33         \$100,000         Emergency funding         No         No           EM#74)         7         Coachella CA         JUIV-02         \$550,000         No         Undetermined         No           FM 1         7         Coachella CA         JUIV-02         \$550,000         No         Undetermined         No           9         Anaheim CA         JUIV-02         \$550,000         No         No         Undetermined           1         B         Anaheim CA         JUIV-02         \$550,000         No         Undetermined         Undetermined           1         B         Anaheim CA         JUIV-02         \$550,000         No         Undetermined         Undetermined           1         B         Anaheim CA         JUIV-02         \$550,000         No         Undetermined         Undetermined           1         B         Anaheim CA         JUIV-02         \$550,000         No         Undetermined <td>Mohawk Mini Mart (EAR #72)</td> <td>9</td> <td>Oro Grande CA</td> <td>July-02</td> <td></td> <td>No</td> <td>Undetermined</td> <td>Site is still participating in EAR Account.</td>	Mohawk Mini Mart (EAR #72)	9	Oro Grande CA	July-02		No	Undetermined	Site is still participating in EAR Account.
R#3)         7         Bythe CA         July-33         \$100,000         Emergency tunding         No         No           EM#74)         7         Coachella CA         July-33         \$100,000         Emergency tunding         No         Undetermined         No           EM#74)         7         Coachella CA         July-02         \$550,000         No         Undetermined         Undetermined           N         A         Actemic CA         July-02         \$550,000         No         Undetermined         Undetermined           N         A         Actemic CA         July-01         \$250,000         No         Undetermined         Undetermined           N         A         Actemic CA         July-01         \$250,000         No         Undetermined         Undetermined           N         A         Actemic CA         July-01         \$250,000         No         Undetermined         Undetermined           N         A         Actemic CA         July-01         \$250,000         No         Undetermined         Undetermined           N         B         Actemic CA         July-01         \$250,000         No         Undetermined         Undetermined           N         B         B	General Delivery (EAR #73)	9	Yermo CA	July-02		No	Undetermined	Site is still participating in EAR Account.
R#30         7         Bythe CA         July-G3         \$100,00         Emergency funding         No         Indetermined           EMF#74)         7         Caachella CA         July-Q2         \$\$500,000         No         Undetermined         Undete								
EAR#74         7         Coachella CA         July-02         \$50,000         No         No         Undetermined         No           1         7         Essex CA         July-02         \$50,000         No         <	City of Blythe Multiple Sites (EAR #3)	7	Blythe CA	July-93	\$100,000	Emergency funding	No	EAR case closed in 1994. Sites (57) received funds from the City of Blythe for cleanup.
())         (7)         Essex Ca         July-Q2         \$50,000         No         No         Nodelemined           (1)         (1)         (1)         (1)         (1)         (1)         (1)           (2)         (1)         (1)         (1)         (2)         (1)         (1)           (2)         (1)         (1)         (1)         (2)         (1)         (1)         (1)           (2)         (2)         (1)         (1)         (2)         (2)         (1)         (1)           (2)         (2)         (1)         (2)         (2)         (1)         (1)         (1)           (2)         (2)         (1)         (2)         (2)         (1)         (1)         (1)           (2)         (2)         (1)         (2)         (2)         (1)         (1)         (1)           (2)         (2)         (1)         (2)         (2)         (2)         (1)         (1)           (2)         (2)         (2)         (2)         (2)         (2)         (1)         (1)           (2)         (2)         (2)         (2)         (2)         (2)         (2)         (2)         (2)	Former Deleon's Service Station (EAR #74)	7	Coachella CA	July-02		No	Undetermined	Site is still participating in EAR Account.
(*)         (*) <td>Goff's General Store (EAR #75)</td> <td>7</td> <td>Essex CA</td> <td>July-02</td> <td></td> <td>No</td> <td>Undetermined</td> <td>Site is still participating in EAR Account.</td>	Goff's General Store (EAR #75)	7	Essex CA	July-02		No	Undetermined	Site is still participating in EAR Account.
8         Anaheim CA         July-90         S200,000         No EAR tunds were expended.         Undetermined           1         8         Pedley CA         July-01         \$\$500,000         No         Undetermined         Undetermined           1         8         Pedley CA         July-01         \$\$500,000         No         Undetermined         Undetermined           1         8         Riverside CA         July-01         \$\$550,000         No         Undetermined         Undetermined           1         8         Bioomington CA         July-02         \$\$50,000         No         Undetermined         Undetermined           1         8         Bioomington CA         July-02         \$\$50,000         No         Undetermined         Undetermined           1         8         Dontario CA         July-02         \$\$50,000         No         Undetermined         Undetermined           1         8         Ontario CA         July-02         \$\$50,000         No         Undetermined         Undetermined           1#81)         8         Ontario CA         July-02         \$\$50,000         No         Undetermined         Undetermined           1#82)         8         Indicermined         July-02								
8         Pedley Ca         July-00         S500,000         No         Undetermined           1         8         Anahein CA         July-01         \$\$250,000         No         Undetermined           1         8         Anahein CA         July-01         \$\$250,000         No         Undetermined           1         8         Riverside CA         July-01         \$\$350,000         No         Undetermined           1         8         Bloomington CA         July-02         \$\$50,000         No         Undetermined           1         8         Bloomington CA         July-02         \$\$50,000         No         Undetermined           1         8         Chara CA         July-02         \$\$50,000         No         Undetermined           1         8         San Burardino CA         July-02         \$\$50,000         No         Undetermined <tr< td=""><td>Norco Trucking (EAR #41)</td><td>œ</td><td>Anaheim CA</td><td>July-99</td><td>\$200,000</td><td>No EAR funds were expended.</td><td>Undetermined</td><td>EAR case closed in 1999.</td></tr<>	Norco Trucking (EAR #41)	œ	Anaheim CA	July-99	\$200,000	No EAR funds were expended.	Undetermined	EAR case closed in 1999.
()         8         Anathemic A         July-01         \$250,000         No         Undetermined         Undetermined         Undetermined         Undetermined         No         No </td <td>Circle K Site (EAR #47)</td> <td>æ</td> <td>Pedley CA</td> <td>July-00</td> <td></td> <td>No</td> <td>Undetermined</td> <td>Site is still participating in EAR Account.</td>	Circle K Site (EAR #47)	æ	Pedley CA	July-00		No	Undetermined	Site is still participating in EAR Account.
8         Riverside CA         July-01         \$350,000         No         Undetermined           1         8         Bloomington CA         July-02         \$50,000         No         Undetermined           1         8         Fontana CA         July-02         \$50,000         No         Undetermined           1         8         Fontana CA         July-02         \$50,000         No         Undetermined           1         8         Ontario CA         July-02         \$50,000         No         Undetermined           1         8         Ontario CA         July-02         \$50,000         No         Undetermined           1         8         Ontario CA         July-02         \$50,000         No         Undetermined           1         8         Chino Hills CA         July-02         \$50,000         No         Undetermined           1         8         Chino Hills CA         July-02         \$50,000         No         Undetermined           1         8         Chino Hills CA         July-02         \$50,000         No         Undetermined           1         8         Chino Hills CA         July-02         \$50,000         No         Undetermined         Ind	Caliber Investment (EAR #55)	8	Anaheim CA	July-01	\$250,000	No	Undetermined	Site is still participating in EAR Account.
(*)         8         Bioomington CA         July-02         \$50,000         No         Undetermined	G. W. Singletary (EAR #56)	8	Riverside CA	July-01		No	Undetermined	Site is still participating in EAR Account.
8         Fontana CA         July-02         \$50,000         No         No         Undetermined         Noteermined         Noteermined         Noteermined         Noteermined         Noteermined         Noteermined         Noteermined         No         Noteermined         No		8	Bloomington CA	July-02		No	Undetermined	Site is still participating in EAR Account.
8         Ontario CA         July-02         \$50,000         No EAR tunds were expended.         Undetermined           #81)         8         San Bernardino CA         July-02         \$50,000         No         Undetermined         Undetermined           #81)         8         Chino Hills CA         July-02         \$50,000         No         Undetermined         Undetermined           #81)         8         Chino Hills CA         July-02         \$50,000         No         Undetermined         Undetermined           #82)         8         Highland CA         July-02         \$50,000         No         Undetermined         Undetermined           ##20         9         Poway CA         June-93         \$400,000         Retreacy Funding Granted in 1993 to         Undetermined         Image: No           #19)         9         Spring Valley CA         August-95         \$50,000         No EAR tunds were expended.         No           #19)         9         Spring Valley CA         August-95         \$55,288,664         No         No	Rich Mart (EAR #77)	8	Fontana CA	July-02		No	Undetermined	Site is still participating in EAR Account.
8         San Bernardino CA         July-02         \$50,000         No         Undetermined         Undetermined         Undetermined         Indetermined         Indetermi	Fast Fuel #920 (EAR #78)	8	Ontario CA	July-02	\$50,000	No EAR funds were expended.	Undetermined	EAR case closed in 2003.
8         Chino Hills CA         July-02         \$50,000         No         Undetermined         Undetermined         Indetermined	Old P & M Station (EAR #80)	8	San Bernardino CA	July-02		No	Undetermined	Site is still participating in EAR Account.
0         8         Highland CA         July-02         \$50,000         No         Undetermined         Undetermined         Indetermined	Hatton / Yoder Gas Station (EAR #81)	8	Chino Hills CA	July-02		No	Undetermined	EAR Account case closed in 2003.
9         Poway CA         June-33         \$400,000         Emergency Funding Granted in 1993 to Abate Gasoline Flow into Creek         Undetermined         1           9         Spring Valley CA         August-95         \$50,000         No EAR funds were expended.         No	Sanchez / Castro Gas Station (EAR #82)	8	Highland CA	July-02		No	Undetermined	Site is still participating in EAR Account.
9         Poway CA         June-93         \$400,000         Emergency Funding Granted in 1993 to Abate Gasoline Flow into Creek         Undetermined         I           9         Spring Valley CA         August-95         \$50,000         No EAR funds were expended.         No           1         325,288,664         \$25,288,664         No         No         No         No								
9         Spring Valley CA         August-95         \$50,000         No EAR funds were expended.         No           7         \$25,288,664         \$25,288,664         \$25,288,664         No	Quick Chek Gas Facility (EAR #2)	6	Poway CA	June-93	\$400,000	Emergency Funding Granted in 1993 to Abate Gasoline Flow into Creek	Undetermined	EAR Account case closed in 1993. Site also applied to Cleanup Fund (USTCF #3546).
\$25,288,664	Dianne's / J.R. Mini-Mart (EAR #19)	6	Spring Valley CA	August-95	\$50,000	No EAR funds were expended.	No	EAR case closed in 1997. RP applied to Cleanup Fund (#10904).
					\$25,288,664			

Note: Highlighted items reflect the seven orphan sites we discuss in our report.

## COMMENTS

California State Auditor's Comments on the Response From the California Environmental Protection Agency, the Department of Toxic Substances Control, and the State Water Resources Control Board

To provide clarity and perspective, we are commenting on the responses from the California Environmental Protection Agency (Cal/EPA), the Department of Toxic Substances Control (Toxics) and the State Water Resources Control Board (State Water Board), to our audit. The numbers correspond with the numbers we have placed in their responses.

Contrary to Cal/EPA's implication, our report does not conclude that the lack of a brownfield definition is an impediment to cleanup or redevelopment. However, we do believe such a definition is essential if it is going to create a meaningful database of brownfields and other contaminated sites. For example, as discussed on page 17, the State Water Board believes that if it were to require the regional water quality control boards to identify brownfields in its Geotracker database, the information captured would reflect each project manager's definition of a brownfield because a single understanding of what constitutes a brownfield does not exist. Thus, we are recommending that Cal/EPA establish a uniform brownfield definition to ensure the consistent reporting of information if the Legislature approves the upgrade or development of a statewide database.

Our report is accurate as written. As we state on page 16, according to its January 1, 2003, report on the Expedited Remedial Action Program, three sites are eligible to receive orphan share funding.

We do not agree that changes to our report are necessary. Our report clearly points out that although State General Fund (General Fund) appropriations were previously available, Toxics can no longer rely on this funding. Further, Toxics' response does not address the \$77 million that the State transferred back to the General Fund from the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Account. Thus, as our heading on page 18 states, Toxics must rely more on fees to fund orphan site cleanup efforts.

Toxics is incorrect. Health and Safety Code, sections 25189.5 through 25189.7 allow the courts to impose fines of up to \$250,000 for each day of violation.

Toxics is incorrect. Figure 2 on page 19 reflects actual revenues from certain accounts shown in Appendix A that state law allows Toxics to use for cleanup. Thus, Figure 2 includes more than just those revenues relating to the Toxic Substances Control Account. Nevertheless, to provide clarification we have modified page 19 to state the following: Figure 2 shows the various revenues from certain accounts shown in Appendix A between fiscal years 1998–99 and 2002–03. We also revised the title of Figure 2.

To address Toxics' concern we added the word "federal" on page 22.

Toxics is correct that funding from general obligation bonds and General Fund appropriations are legislative appropriations. However, because we present these items separately on page 24, the term "legislative appropriations" refers to any other appropriations that have not been listed. For example, as shown on pages 33 through 35, state law identifies legislative appropriations as a funding source for many of the accounts that Toxics can use for cleanup without separately identifying the type of appropriation. Nevertheless, to address Toxics' concern we have added a footnote on page 24.

Toxics has provided us conflicting information about the reason it did not apply for the other two federal Small Business Liability Relief Brownfields Revitalization Act (revitalization act) grants. In an e-mail dated June 19, 2003, the chief of its Planning and Management Branch stated the following: Although states are eligible to apply for these grants, we were given guidance from United States Environmental Protection Agency (U.S. EPA) staff that the main target for these competitive grants was local governments, nonprofit organizations, etc. Our management chose not to compete with those entities for the small pot of money available for the assessment, cleanup, and revolving loan fund grants, and instead to put our efforts into securing the state response program grant. Until now, Toxics never expressed to us its concern that applying for these grants would require additional staff to manage and perform the necessary activities. Further, the U.S. EPA told us that the main reason why Toxics did not submit an application for the competitive brownfields grants for assessment, cleanup, and revolving loan fund was because it did not have a proposal for specific projects.

Toxics is correct that the revitalization act excludes sites listed on the National Priorities List (NPL) from its definition of brownfields. However, according to the chief of its Planning and Management Branch, there was no comprehensive effort by Toxics to identify sites that may qualify for the grant addressing the direct remediation of brownfield sites. Therefore, it could be missing an opportunity to benefit from such a grant. To provide clarification, we have deleted our reference to the Stringfellow site and amended page 30 to reflect the above language.

Toxics is misinterpreting the information we present on pages 29 and 30. Specifically, Toxics is merely subtracting the \$77 million transfer back to the General Fund from the original \$85 million allocation and computing a difference of \$8 million. However, we are presenting the fund balance. As reported in the Governor's Budget and as shown on page 34, the CLEAN Account had a fund balance of \$1.2 million at the end of fiscal year 2001–02. To provide clarification, we have amended page 30.

We disagree with Toxics' assertion that our discussion of the authorized uses of the Hazardous Substance Account is misleading. The purpose of the information on pages 33 through 35 is to inform the reader of the various funding sources available to Toxics and the State Water Board, including their authorized uses.

Toxics is incorrect. Health and Safety Code, Section 25399.1 states that the money in the Expedited Site Remediation Trust Fund may be expended by Toxics upon appropriation by the Legislature.

We disagree. Health and Safety Code, Section 25337 states that the Site Remediation Account shall be funded by money transferred from the Toxic Substances Control Account, upon appropriation by the Legislature.

To address Toxics' concern, we have modified the footnote on page 35.

The State Water Board states correctly that it provided us with the information shown on pages 50 through 56. Using this information, we identified nine sites that the State Water Board indicated were orphan sites that had not been cleaned up. We then excluded two federal NPL sites, which resulted in seven orphan sites. On June 20, 2003, we sent our analysis to the State Water Board for review. The chief of its financial and administration unit did not indicate that there was a problem with our characterization of the State Water Board's data. Nevertheless, we have modified pages 2, 13, 17, and 31 of our report to state the following: The State Water Board's unaudited data indicate that it has only seven orphan sites.

We agree that the State Water Board must always assess the benefits of applying for grants; however, it does not always do so. Specifically, as we point out on page 31, the State Water Board did not apply for grants under the revitalization act because it believed Toxics would apply for them. Given the State's current fiscal condition, as we recommend, the Cal/EPA should ensure that Toxics and the State Water Board apply for funding available under the revitalization act. cc: Members of the Legislature Office of the Lieutenant Governor Milton Marks Commission on California State Government Organization and Economy Department of Finance Attorney General State Controller State Treasurer Legislative Analyst Senate Office of Research California Research Bureau Capitol Press