



Program Sunsets

Concerns

Improving Superfund

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State Superfund Reauthorization: Expediting Hazardous Substance Site Cleanups

California's "Superfund" program, enacted in 1981 to clean up contaminated hazardous substance sites, sunsets on January 1, 1999. Much cleanup work remains to be done, with upwards of 700 sites requiring cleanup action by the Department of Toxic Substances Control (DTSC).

Concerns have been expressed that too much time is spent under the current program allocating and disputing responsibility for cleanup costs, thereby delaying and diverting resources from actual cleanup. Others have claimed that cleanup standards are uncertain, leading to cleanup delays. Yet others have questioned whether the state has been focusing its resources on cleaning up the highest risk sites.

In this report, we recognize the practical concerns faced by government and the regulated community in cleaning up contaminated sites. We make recommendations that are designed to address in a workable way the concerns raised about the state Superfund program, while advancing the state's goals for the program. These goals should include protecting public health and the environment and facilitating the reuse of contaminated sites in a timely manner. We recommend that the Legislature:

- ❖ Establish joint and several liability as the state standard as a general rule, with various modifications, including specified circumstances for proportional allocations of liability.
- ❖ Provide liability protection and/or expedited settlements for prospective purchasers of hazardous substance sites and modest contributors to the contamination.
- ❖ Provide state fiscal incentives, such as state funding for "orphan share" sites where some responsible parties cannot be identified or are unable to pay cleanup costs.
- ❖ Enact in statute policies establishing cleanup standards for the voluntary cleanup program.
- ❖ Authorize in statute cleanup standards based on the future intended land use.
- ❖ Require the DTSC to prioritize sites for cleanup action based on clearly defined criteria, and inform the Legislature of its priority site rankings.

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CURRENT PROGRAMS FOR SITE CLEANUP

Currently, the cleanup of contaminated hazardous substance sites in the state is conducted under a variety of federal, state, and local programs, including the state Superfund program. These programs are identified in Figure 1 and discussed below.

Federal Program. The federal Superfund program enacted in 1980 is responsible for cleaning up hazardous substance sites in the nation that pose the highest risk to public health and the environment. These sites are placed on the “National Priorities List” (NPL). There are currently 94 NPL sites in California. The DTSC works jointly with the U.S. Environmental Protection Agency (U.S. EPA) to oversee cleanup at NPL sites. The state pays 10 percent of the cleanup costs and all of the operations and maintenance costs at NPL orphan sites. Under federal law, states are basically free to establish their own cleanup programs and standards for sites that are not NPL sites.

State Programs. Sites not listed under the federal program are cleaned up under a number of state programs. Some of these state programs rely upon enforcement orders to clean up the site, while others rely on voluntary compliance.

Under the state Superfund program, DTSC selects sites to be assessed and cleaned up, based on potential or known contamination. Where significant contamination is identified, the department issues enforcement orders, and oversees the cleanup by parties who are responsible for the

contamination. At “orphan sites”—sites where responsible parties cannot be found or are unable or unwilling to provide a timely cleanup—the department cleans up the site itself and later seeks to recover costs from responsible parties.

While the Superfund program administered by DTSC is the state’s main site cleanup program, there are other programs administered by various state agencies (such as the regional water boards) to which the department can refer sites depending on the nature of the contamination. In addition, there are voluntary site cleanup programs. For example, the department administratively established the Voluntary Cleanup Program (VCP), under which a party not subject to an enforcement order agrees to clean up a site under DTSC’s oversight using Superfund cleanup standards. Under another program, the Expedited Remedial Action Program (ERAP), a responsible party (generally not subject to an enforcement order) volunteers to have a cleanup conducted under a process that is pilot testing procedures different from the main Superfund program.

Local Programs. Finally, local health agencies oversee the cleanup of less complex, lower risk sites, upon request of a responsible party and provided that DTSC has not issued an enforcement order. The department is notified of the cleanup, and can assume jurisdiction over the cleanup if state Superfund cleanup standards are not being met.

Hazardous Substance Sites. Figure 2 shows the universe of hazardous substance sites in California.

As Figure 2 shows (see page 4), the DTSC estimates that there are 4,167 sites throughout the

state with known or potential hazardous substance releases that may require cleanup action. Since 1981, the department has referred 2,380 of these sites to other state and local agencies,

Figure 1	
Site Cleanup Programs in California	
Federal Superfund Program	
<ul style="list-style-type: none"> • Cleans up highest risk sites in nation placed on “National Priorities List” (NPL); there are 94 NPL sites in state. • Department of Toxic Substances Control (DTSC) shares oversight of cleanups and orphan site cleanup costs with U.S. EPA. • Cleanup standards contain preference for permanent cleanups that allow sites to be used for any purpose. • Joint and several liability standard for cleanup costs. 	
State Superfund Program	
<ul style="list-style-type: none"> • Enacted by Chapter 756, Statutes of 1981 (SB 618, Carpenter). • DTSC selects sites for program and issues enforcement orders. • 254 Superfund sites in DTSC's current annual workplan. • Cleanup standards generally same as under federal Superfund program. • Proportional liability for cleanup costs, although federal standard (joint and several liability) is used in practice. • Limited dispute resolution. 	
State Expedited Remedial Action Program	
<ul style="list-style-type: none"> • Established by Chapter 435, Statutes of 1994 (SB 923, Calderon). • Pilot program in DTSC for cleanup of up to 30 sites. • 16 sites have entered program voluntarily since 1994. • Cleanup standards based on intended site use after cleanup. • DTSC must allocate liability for cleanup costs on proportional basis. • Dispute resolution open to a broad range of parties on several issues. 	
State Voluntary Cleanup Program	
<ul style="list-style-type: none"> • Established administratively by DTSC in 1993. • Eligible sites are lower-risk sites not listed as NPL or state Superfund sites. • 264 sites have entered program voluntarily (not subject to enforcement order) since 1993. • Cleanup standards same as under state Superfund program. • DTSC oversees site cleanup on fee-for-service basis. • No liability allocations per se; volunteering parties commit to paying fully for the cleanup. 	
Local Programs	
<ul style="list-style-type: none"> • Local health agencies authorized by Chapter 671, Statutes of 1995 (SB 1248, O'Connell) to oversee low-level cleanups not subject to a DTSC enforcement order. • Over 1,000 sites have been referred by DTSC to local agencies. • DTSC to assume jurisdiction if state Superfund cleanup standards not being met in local cleanup. • No liability allocations per se; volunteering parties commit to paying fully for the cleanup. 	



mainly local health agencies and regional water boards, with the remaining 1,787 sites under the department's jurisdiction. Of the sites under departmental responsibility, cleanup has been completed at 322 sites, and the department has determined that no action or further action is required at another 383 sites. The department's current workplan includes cleanup at 402 sites (includes state Superfund and other sites). Additionally, the department is involved in some work activity at another 339 sites that are not likely to involve cleanup action. For example, this work activity includes enforcing permit conditions of operating hazardous waste management businesses. There are 341 remaining sites awaiting either a preliminary assessment by the department or, given known contamination, departmental enforcement action and site cleanup.

State Site Cleanup Programs Funded by a Variety of Fund Sources.

Since 1981, the state's site cleanup programs at DTSC have been supported by a variety of fund sources, including the General Fund, federal funds, bond funds, reimbursements, cost recoveries, and fees. Funds for site cleanup from a \$100 million 1984 bond measure are essentially

depleted. For 1998-99, the budget provides about \$85 million for the department's site cleanup programs, funded from the General Fund (\$32 million), federal funds (\$20 million), and a combination of environmental fees (levied on all corporations with at least 50 employees), cost recoveries, and reimbursements (\$33 million). The majority of these funds are for the department to oversee the cleanup conducted and paid for by responsible parties.

Under the state Superfund program and the department's voluntary cleanup programs, parties responsible for the contamination at a site are responsible for paying the costs to clean up a site. However, the state provides some fiscal incentives

Figure 2

Hazardous Substance Sites in California^a

	Number of Sites
Total Number of Sites	4,167
Referred by Department of Toxic Substances Control (DTSC) to other agencies ^b	2,380
Sites remaining under DTSC's jurisdiction	1,787
Sites Under DTSC's Jurisdiction	1,787
Completed site cleanups ^c	322
No action/No further action required	383
Current workplan of "active" sites ^c	402
"Backlog" work ^d	341
Other ^e	339

^a Sites with known or potential contamination, according to the DTSC as of June 30, 1998.
^b Sites referred mainly to regional water boards and local health agencies.
^c Includes (1) sites in state Superfund, voluntary cleanup, and Expedited Remedial Action programs, and (2) Federal National Priority List sites.
^d Sites awaiting DTSC's preliminary assessment or cleanup action.
^e Sites not likely to involve cleanup action, but involve some other work activity by the department (for example, enforcing permit conditions of operating hazardous waste management businesses).

to encourage cleanups. These include the creation of Mello-Roos Districts to allow communities to reduce property taxes to encourage site cleanups and to issue bonds for site assessment and cleanup. In addition, recent law provides some liability immunity for lenders who provide financing for a cleanup. By reducing the risks from lending, lenders should be more likely to make loans for cleanups.

State Superfund Program Sunsets January 1999. The state Superfund program sunsets on January 1, 1999. A legislative conference committee established in July is considering amendments to SB 2170 (Sher) to continue and reform this program.

CALIFORNIA SUPERFUND PROGRAM: CURRENT CONCERNS

For purposes of this report, we surveyed a wide range of stakeholders of the state Superfund program, including the regulated community, environmental organizations, DTSC staff, and other state staff. These interviews revealed a range of concerns with the state Superfund program which are summarized in Figure 3. We also interviewed staff of the federal Superfund program as well as staff of other states' Superfund pro-

grams in order to gain insight into Superfund reform efforts taking place in other jurisdictions.

Based on our survey, we find that there is a general concern that the current California Superfund program results in cleanup delays and the abandonment of hazardous property. In addition, many parties we interviewed were uncertain whether the state's resources have been used to clean up the sites posing the *highest* risk

to public health and the environment. We discuss each of these concerns in further detail below.

Cleanup Delays. There appears to be general agreement that it has been taking a long time to get cleanups started and completed under the state Superfund program. According to DTSC, while cleanup

Figure 3

Concerns With State Superfund Program



Cleanup Delays

- Takes a long time to start and complete cleanups.



Property Abandonment

- Program encourages contaminated property to be abandoned or remain idle.



Lack of Focus on Highest Risks

- Priority ranking of sites administratively discontinued.



at relatively simple sites with cooperative responsible parties averages about five years, cleanup at other sites has been taking ten or more years.

In some respects, cleanups are inherently time-consuming in that they are technology driven. For example, cleanups involving groundwater contamination require a particularly complex and expensive technology to remedy the contamination. However, the timeliness and speed of cleanup activity also depend on elements of the cleanup process that are dictated by law and administrative practice.

Specifically, the regulated community has expressed concern about the *joint and several* liability standard currently applied by the department (using federal law) to assign responsibility for site cleanup costs under the Superfund program. It has argued that this standard unfairly allocates the financial costs of site cleanup and leads to excessive litigation costs to “correct” this unfairness. Additionally, the regulated community has argued that cleanup standards—to determine the level of cleanup at a site—are uncertain. This also can lead to cleanup delays, particularly when the reasonableness of the applied standard is disputed.

We think that there are opportunities to expedite parts of the cleanup process, and we discuss these later in this report.

Property Abandonment. Concern has also been expressed that the current state Superfund program encourages contaminated or potentially contaminated properties to be abandoned or remain idle rather than being redeveloped for

some economically beneficial purpose. Current property owners may abandon such properties because they fear potential liability for cleanup costs if the extent of contamination is fully investigated in the context of a potential sale. Additionally, prospective purchasers of contaminated property may be reluctant to buy these properties fearing liability for cleanup costs. Prospective purchasers may not be able to assess the extent of the contamination and therefore are not able to estimate their potential future costs as a property owner.

The state currently provides some fiscal incentives and limited liability protection to *innocent* parties (parties, such as prospective purchasers, not responsible for the contamination) to encourage the redevelopment of these abandoned or idle sites. A number of bills proposed this session concern this liability protection. These include SB 1521 (Alpert)—which would clarify the liability protection provided to lenders—and SB 1898 (Polanco)—which would continue the liability protection provided to redevelopment agencies involved in site cleanups.

Additionally, sites with known or potential contamination may lay idle if they have to be cleaned up to a standard that is too costly compared to the purposes for which the property will be reused.

Focusing State Resources on Highest Risk Sites. It is unclear whether the state’s Superfund program has focused on cleaning up the highest risk sites. This is because DTSC has discontinued a priority ranking of sites required under current

law. The department has indicated that it discontinued this ranking in the early 1990s when bond funds—historically the department’s major source of funding for direct site cleanup—were substantially depleted. Additionally, the department has indicated that no formal written criteria are used

by it in deciding what sites to add to its annual workplan. Rather, the department makes a “judgment call,” by considering such issues as a site’s relative groundwater threat, the extent of surface contamination, and a site’s proximity to a residential community.

STATE SUPERFUND REAUTHORIZATION: ISSUES FOR LEGISLATIVE CONSIDERATION

Goals for the Reauthorized Superfund Program. In evaluating proposals to reauthorize the state Superfund program, we think that the Legislature should advance the goals set out in Figure 4 below.

The goals for the state Superfund reauthorization listed in Figure 4 are consistent with those set for the existing state and federal Superfund programs. In the following section, we discuss how these goals may be more fully met by addressing

issues related to liability and cleanup standards. We also discuss the role of state fiscal incentives and site prioritization.

LIABILITY ISSUES

Liability for Cleanup Costs Under Current Law. Under current federal and state law, parties responsible for the contamination of a site are liable for the costs of cleanup. Responsible parties include current and former owners and operators

of the site, waste generators, and transporters of waste to the site. The federal and state laws, however, take different approaches to assigning liability, with the state law apportioning *proportional* responsibility and federal law allotting *joint and several* liability.

Under current state law, the liability of responsible parties is proportional,

Figure 4

Goals for Reauthorized State Superfund Program

- Protect public health and the environment.
- Clean up as many sites as possible in timely manner.
- Encourage remediation, rather than abandonment, of sites.
- Promote reuse of property for economic development and other valuable uses.
- Focus resources on actual cleanup.



meaning that a responsible party is only liable for the portion of the cleanup costs attributable to that party's actions. The state is responsible for paying the costs allocated to an "orphan share" (that is, the share of cleanup costs attributable to responsible parties who cannot be found or are unable to pay). However, federal law allows states to go to federal court to enforce cleanup orders and recover their cleanup costs from responsible parties using the *joint and several* liability standard. Under joint and several liability, the state is not required to prove the degree to which each responsible party contributed to the pollution problem. Rather, each responsible party is potentially individually liable for all of the cleanup costs at a site.

In practice, the state has almost always pursued state Superfund litigation in federal courts so as to use the federal liability standard. However, even though the joint and several standard is applied, the burden for cleanup costs seldom falls on a single party. This is for two reasons. First, the department typically issues enforcement orders against multiple responsible parties at a site, leading to settlements where cleanup costs are paid by multiple parties. Second, federal law provides that responsible parties who pay more than their "fair share" of cleanup costs can sue other responsible parties to recover costs that exceed their fair share. The state is not a party to these "contribution" actions and is not involved in making the fair share allocation. Accordingly, the costs of these contribution actions are borne entirely by the responsible parties seeking contribution.

"Joint and Several" Standard Provides Benefits From State's Perspective. Our review finds that the joint and several liability standard has proven to be an effective incentive in producing settlements between the state and responsible parties to conduct cleanups. In fact, almost all state Superfund cases have been settled before going to trial. Settlements appear to be encouraged because of the "hammer" of joint and several liability—that is, a single responsible party being potentially held liable by a court for all of the cleanup costs.

In addition, by applying the joint and several standard, the state does not become responsible for paying the cleanup costs attributable to an orphan share. Moreover, state administrative costs are reduced by not having to determine the extent to which each responsible party contributed to the contamination. We think that the burden of paying the litigation and administrative costs to determine the relative responsibility of various parties is appropriately placed on the parties causing the contamination. This is consistent with the "polluter pays" principle underlying the current state Superfund program.

Unclear Whether Mandating Exclusive Use of a Proportional Standard Would Expedite Cleanups. In the past, the regulated community has argued that cleanups might be expedited if state law mandated that the proportional liability standard be used exclusively by the state. The regulated community argues that responsible parties might be more willing to comply with enforcement orders (or come forward voluntarily)

and spend fewer resources in trying to “reallocate” liability if they feel that they are paying their “fair share” of cleanup costs.

However, experience in California and other states suggests that the use of a proportional liability standard would not necessarily expedite cleanups relative to the joint and several standard. For example, the U.S. EPA recently pilot-tested a proportional liability allocation process at 12 federal Superfund sites. The U.S. EPA concluded that the process they pilot-tested was cumbersome, involved substantial new workload for the government to allocate responsibility for cleanup costs, and did not advance their goal of cleaning up sites faster.

Second, California is currently pilot-testing proportional liability allocation in the voluntary ERAP. Under ERAP, state funding for the orphan share is to be provided only if funds are available. (When funds are not available, responsibility for the orphan share is allocated proportionately among the viable responsible parties.) Since 1993, sixteen sites (out of a maximum of 30 allowed) have entered the program, and cleanup work has been completed at two sites. Since most ERAP sites are in the early stages of cleanup (site investigations, et cetera), the impact of the proportional allocation component of this program on encouraging and expediting cleanups cannot yet be assessed.

However, based on discussions with ERAP participants, we find that it is the availability of state funding for the orphan share, rather than the

proportional allocation per se, that has attracted some participants to volunteer cleanup action under ERAP. To provide *full* state funding for the orphan share at California sites remaining to be cleaned up could be costly. For example, Arizona—which mandated a proportional liability allocation process in 1996 and prohibited state actions in federal court—has estimated orphan funding needs of \$18 million annually over 15 years at just 28 sites. Accordingly, it is unclear the degree to which cleanups would be encouraged or expedited if a proportional liability standard were mandated, in the absence of robust orphan share funding.

Recommend Joint and Several Liability Standard as General Rule, With Various Modifications. We recommend that state law be changed to provide, consistent with existing practice, that the joint and several liability standard be applied by the state as a general rule to enforce cleanup orders and recover state cleanup costs from responsible parties. While this would mean that proportional liability would no longer be the general rule, we further recommend various modifications, including a provision for proportional liability in some circumstances. We think if this change in law is combined with the additional modifications discussed below, the state will retain the benefits to the state from using the joint and several standard, while addressing concerns that this standard delays and discourages cleanups. We recommend the following four modifications:



- ❖ **Enforcement Action Net Should Be Cast Widely.** As a general rule, DTSC attempts to identify a large number of responsible parties for purposes of issuing enforcement orders to clean up a site. In order to ensure that this practice continues, the Legislature should enact legislation directing the department to take enforcement action against the largest manageable number of responsible parties. Increasing the number of potential settlers with the department reduces the likely burden on an individual responsible party for cleanup costs. Responsible parties will be more likely to comply with enforcement orders and enter into settlements if they perceive their cost burden as being fair.
- ❖ **De Minimis Settlements.** While enforcement actions should encompass the largest manageable number of responsible parties, we think that it is not cost-effective to pursue some enforcement actions when excessive litigation costs would result. Specifically, parties who contributed modest amounts of hazardous substances to a site can end up incurring litigation costs (to defend lawsuits from other responsible parties) that are highly disproportionate to their relative contribution to the contamination. In order to reduce these private party costs, the Legislature should follow federal law and provide for expedited settlements for these parties. These settlements are commonly referred

to as “de minimis” settlements. When such a settlement is made, the settling responsible party is protected from lawsuits from other responsible parties.

- ❖ **Liability Protection for Prospective Purchasers of Known or Potentially Contaminated Sites.** Many communities contain properties, typically in the urban core, that are abandoned or underutilized due to known or perceived contamination from prior commercial or industrial uses. These properties—known as “brownfields”—tend to be unattractive candidates for redevelopment because prospective purchasers are concerned about being held liable for all cleanup costs related to known or undiscovered contamination. The existence of brownfields may divert development to “greenfields” (land, typically in suburban areas, with no previous commercial or industrial use). This may create societal costs, such as increased highway congestion, infrastructure needs, and environmental degradation. To encourage the redevelopment of brownfields, the Legislature should provide statutory liability protection to prospective purchasers, provided that they did not contribute to the contamination and there are other responsible parties willing to conduct the cleanup. The prospective purchaser should also commit to providing full access to the site for purposes of the cleanup and agree not to exacerbate the contamination. Such

statutory liability protection has previously been granted for a single site—the former Kaiser Steel site in Fontana. In this case, Kaiser was the responsible party and paid for the site cleanup. The liability protection granted to the purchaser of the site facilitated the redevelopment of the site as the Penske Speedway.

- ❖ **Orphan Share Funding.** The Legislature should provide a process whereby cooperating responsible parties could access state funding—to the extent state funding is made available—to reimburse them for at least some costs attributable to an orphan share. In general, this is a change from current *practice* whereby the state pays for site cleanup only at sites where there are *no* identified viable responsible parties to pay for the cleanup. These sites—where the orphan share and therefore the state's share is 100 percent—are referred to as “orphan sites.”

To the extent that responsible parties view their cost burden as fairer under such a system (because their cost burden is more proportionate to their contribution to the contamination), responsible parties may be more willing to comply with enforcement orders, settle with the department, and limit court actions against other responsible parties. This should lower responsible parties' litigation costs. In order to prevent a shifting of administrative costs to the state, we recommend that the responsible parties determine the amount of the orphan share to be allocated among the

various parties including the state, and that this allocation be approved by the department in a settlement agreement. Furthermore, the department should be fully reimbursed for its costs to administer an orphan share fund. Any reimbursement from the orphan share fund to a responsible party should be conditional on full compliance by that party with all enforcement orders and agreements.

We think that the ability of responsible parties to access state orphan share funding should be conditioned on the availability of state funds. Since we recommend that joint and several liability be the general rule, this means that if state funding for the orphan share were not available, the viable responsible parties would remain collectively responsible to pay for cleanup costs attributable to the orphan share. Otherwise, cleanups could be delayed if the state were responsible for some of the cleanup costs, but lacked the necessary funding.

Before making such a change in state law, it would be important to know the extent of the potential funding needs. Based on the department's very rough estimates (not based on a site-by-site analysis), the prospective demand on an orphan share fund from site cleanups in the pipeline could be around \$15 million annually. But given the uncertainty of the underlying assumptions in developing this estimate, and the lack of a site-by-site analysis, we think that the demands on such a fund could be much higher. If a process for orphan share funding were to be provided, we think that the department should be required to



develop, and submit to the Legislature, a multiyear budget of orphan share funding needs based on a site-by-site analysis. As an example, Arizona has a 15-year budget for its orphan share funding needs.

CLEANUP STANDARDS ISSUES

Cleanup Standards Under Current Law.

Currently, there are no chemical-by-chemical statewide standards to use when determining the level of cleanup when a particular chemical is found in soil or groundwater. Current law instead requires site-specific risk assessments, with a preference for permanent remedies and treatment to allow unrestricted use of the site. However, it has been the practice for several years to base the level of cleanup on the future intended use of the site.

Need for Greater Certainty and Legislative Direction. Our review finds that under the current program, many policies regarding cleanup standards have been set administratively by the department without explicit statutory authority or direction. Consequently, the Legislature cannot be assured that (1) these policies are consistent with its goals for the state Superfund program and (2) the policies are applied consistently across the state. We think that clarifying the law and providing greater legislative direction, as summarized in Figure 5, would serve to hold the department more account-

able, as well as reduce costs and delays associated with uncertainty.

Our review finds a need to clarify the law and provide greater legislative direction in the following areas:

- ❖ ***Land Use-Based Cleanups.*** It has been the department’s practice to base the level of cleanup at a site on future intended land use, provided that the purposes for which the land can be used in the future after the cleanup (“land use controls”) are explicitly set out in the deed. While statute requires this practice for sites in the ERAP, it is silent as regards sites in the state Superfund program. Basing the level of cleanup on the intended use of the land appears to be a practical approach that reduces costs, and therefore we think that authority for this current practice should be enacted in law. However, appropriate controls should be placed in statute in order to ensure protection of public health and the environment given that some level

Figure 5

Legislative Direction on Cleanup Standards Needed

- ☑ Authorize basing level of cleanup on intended use of land.
- ☑ Establish centralized registry of land use controls.
- ☑ Authorize Voluntary Cleanup Program in statute including applicable cleanup standards.
- ☑ Consider default standards for cleanup at certain types of sites.

of contamination typically remains after the cleanups. These controls should include land use controls at state Superfund sites similar to that at ERAP sites. Additionally, there should be a centralized, electronically accessible registry of the land use controls that is put in place. Such a registry would promote greater consistency in the use of such controls, and provide useful information both to the affected public and prospective property developers. A similar concept is contained in AB 871 (Wayne).

- ❖ **Voluntary Cleanup Program (VCP).** The VCP was established administratively by the department as an alternative to enforcement-based action under the state Superfund program, using the same cleanup standards as the Superfund program. Under the VCP, DTSC provides technical assistance and oversight on a fee-for-service basis to responsible parties who voluntarily agree to clean up polluted sites. We find that the VCP has encouraged cleanups, particularly because the party volunteering for cleanup gains more control over the timing of the cleanup relative to enforcement-based cleanups. However, we think that establishing the program in law, *including the applicable cleanup standards*, would further encourage cleanups by providing greater certainty to potential participants in the program.

Should “Default Standards” Be Used? An important issue for legislative consideration is whether state law should provide for “default standards” to determine the level of cleanup at a site. Under such an approach, default standards would be set, on a chemical-by-chemical basis, based on an acceptable level of risk to public health and the environment. These standards would serve as an alternative to completing full site-specific risk assessments and allow responsible parties to rely on preset standards for statewide use that determine the level of cleanup required.

It has been argued that the use of these statewide default standards can be cost-effective, particularly at small sites where the cost of a risk assessment can sometimes exceed the cost of the actual cleanup. About 15 states have adopted default standards for use in their site cleanup programs. According to staff in Pennsylvania’s voluntary “Land Recycling Program” designed to expedite cleanups, the most attractive feature of its program to the regulated community has been the option of using the statewide standards. In less than three years, Pennsylvania’s voluntary program has cleaned up about three times as many sites as were cleaned up over 16 years under the Pennsylvania and federal Superfund programs in that state.

The use of default standards may not be appropriate at all sites in the state. This is because such standard measures cannot fully account for site-specific conditions that increase risk, particularly at complex sites where multiple chemicals at the site and the surrounding community interact.



Accordingly, the role for default standards may be most appropriate for smaller, less complex sites that contain one or two chemicals of concern.

FISCAL INCENTIVES

Orphan Share Funding. As discussed earlier, the provision of orphan share funding from the state could facilitate cleanups due to an enhanced willingness of responsible parties to comply with what is perceived to be a fairer allocation of cleanup costs. Orphan share funding serves as a fiscal incentive to encourage cleanups in that it reduces responsible parties' collective responsibility for cleanup costs. This is because the state is paying for a share of the cleanup costs for which the responsible parties would otherwise be responsible.

Grants and Loans for Site Cleanup. The state could provide grants, low-interest loans, or loan guarantees for site cleanups. About 20 states currently provide such assistance, typically limiting the assistance to cities, local redevelopment agencies, and other "innocent" parties who were not responsible for the contamination. Such assistance could facilitate site cleanups and site redevelopment if appropriately targeted to cases where financial assistance is needed, such as in economically distressed areas with development potential.

Alternatively, grants and low-interest loans for site cleanup could be made to responsible parties instead of orphan share funding. In other words, this assistance could be given to partially compensate responsible parties who end up paying some

of the costs attributable to an orphan share. This type of fiscal incentive may be less costly to administer than orphan share funding in that it avoids the state's costs associated with defending the precise size of the orphan share at a site in negotiations or litigation to allocate responsibility for cleanup costs.

Grants for Environmental Assessments. One reason that properties lay idle and are not developed for economically beneficial purposes is because of perceived contamination. In some cases, the cost of determining the contamination acts as a barrier to redevelopment. A number of states offer grants for such environmental assessments, sometimes targeting the grants to cities and local redevelopment agencies. It is appropriate to focus assistance on these entities in that they are often in the best position to make the assessment. This is because many idle and abandoned properties are in city ownership due to local tax delinquencies, et cetera.

The U.S. EPA recently provided grant funds to several local jurisdictions for environmental assessments as part of a brownfields pilot program. In these cases, it appears that this assistance has been cost-effective in that it facilitated the redevelopment of a number of contaminated sites.

Revenue Bonds. The Legislature could authorize the California Pollution Control Financing Authority (CPCFA) to issue revenue bonds on behalf of businesses for the cleanup of contaminated hazardous substance sites. The state would *not* be responsible for making principal and

interest payments on these bonds. Rather, debt service is solely the responsibility of the businesses on behalf of whom the bonds are issued. Since interest on the CPCFA-issued bonds is exempt from state tax and potentially federal tax, the interest rates on the bonds are lower than they otherwise would be, thereby reducing costs to the borrowers using the funds to finance a cleanup. Assembly Bill 1909 (Wayne) contains such a proposal.

Broad-Based Funding Sources for Fiscal Incentives. We think that it would be appropriate to support state fiscal incentives with fees levied on parties that contribute to the hazardous substance problem, provided that the fee burden is spread among a large base so as to minimize the economic impact on any one individual party. For example, the Legislature could amend two existing fees—the environmental fee and the lubricating oil fee—to raise additional revenues for the incentives. The environmental fee (which supports the department) is currently levied on about 24,000 corporations that use, generate, store, or conduct activities related to hazardous materials. The lubricating oil fee (which currently supports the California Integrated Waste Management Board's used oil recycling program) is paid by oil manufacturers on every gallon of lubricating oil sold in California. Used oil is the single largest type of hazardous waste generated in the state (about 25 percent). Since the lubricating oil fee is ultimately paid by anyone driving a vehicle in the state, an expansion of the fee to support fiscal incentives for cleanup would mean that a broad group of persons con-

tributing to contaminated hazardous substance sites would be responsible for some of the costs created.

SITE PRIORITIZATION

Are the State's Resources Focused on Cleaning Up the Highest Risk Sites? Current law requires DTSC to establish a priority ranking of sites selected for the state Superfund program. Current law also provides some very broad criteria for developing this ranking, including risks to public health and the environment. As discussed earlier, the department has not ranked sites based on priority for cleanup action for several years.

While it appears that the requirement for priority ranking under current law could be made clearer and streamlined, we think that (1) a requirement for a priority ranking should be maintained and (2) the ranking should be based on well-defined criteria, adopted by the department in regulation, that include relative risks to public health and the environment. Without a ranking of sites, the Legislature lacks critical information to evaluate the department's budget proposals both for direct site cleanup expenditures and its enforcement efforts. Essentially, the Legislature is unable to determine whether the state's resources are focused on cleaning up the highest risk sites.

Need for Oversight of Sites Referred to Other Agencies. As part of the process of selecting sites for the state Superfund program, the department has referred almost 2,400 sites to other agencies. A majority of these referrals are to local agencies of what are thought to be lower risk, less complex



sites. According to the department, it does not follow up with these agencies to see how the cleanup work is proceeding or to evaluate whether the referred sites continue to be appropriately overseen by another state or local agency outside the state Superfund program.

We believe that the department should be required to exercise some oversight of these referred sites. Without this oversight, it is not

possible to determine whether cleanups are proceeding at the referred sites and to what standard these cleanups are being conducted. Additionally, without the department following up on the referrals, sites that are more appropriately under the department's jurisdiction (due, for example, to contamination being greater than initially thought) would remain under another agency's jurisdiction.

CONCLUSION

Our review finds that much site cleanup work remains to be done in the state. In evaluating proposals for the reauthorization of the state Superfund program, the Legislature will be asked to address issues relating mainly to the liability for cleanup costs and cleanup standards. Our recommendations are designed to address in practical terms the concerns raised about the state Superfund program, while advancing both environmental protection and economic development goals for the program. A summary of our recommendations regarding these and other issues is found in Figure 6 below.

As shown in Figure 6, we offer a number of reforms in the area of assigning liability among responsible parties that we think will encourage and expedite cleanups. We recommend that the "joint and several" liability standard, which has served in practice as an effective enforcement tool, become the state's standard as a general rule.

However, we also recommend a number of modifications to the standard to address concerns that this standard can be unfair and lead to excessive litigation costs.

We also find that there is a need for greater certainty and legislative direction regarding cleanup standards. Specifically, policies for land use-based cleanups and the voluntary cleanup program should be put into statute. There may also be a limited role for "default standards" so as to avoid the costs of a full risk assessment at less complex sites.

We offer a number of state fiscal incentives to encourage and expedite cleanups for legislative consideration, and suggest broad-based funding sources to support them. One potentially costly fiscal incentive would be state funding of the "orphan share" at sites. If this option were to be adopted, we recommend that the department

Figure 6

**State Superfund Reauthorization
Summary of LAO Recommendations**

Issues	Recommendations
Liability Issues	
Liability for cleanup costs	√ Make <i>joint and several</i> liability the overriding standard, with <i>proportional</i> allocations in specified circumstances.
Parties to be included in enforcement orders	√ Require enforcement orders to encompass largest manageable number of responsible parties.
Liability of modest contributors to contamination	√ Provide for expedited <i>de minimis</i> settlements.
Liability of prospective purchasers at sites with known or potential contamination	√ Provide statutory liability protection for prospective purchasers, based on commitment of viable responsible parties to complete cleanup.
Responsibility for funding costs attributable to an <i>orphan share</i>	√ Establish process for state funding of <i>orphan shares</i> (to extent funding made available), with cooperating responsible parties making initial allocation determining orphan share amount.
Cleanup Standards Issues	
Land use-based cleanups	√ Establish statutory authority and enforcement mechanism for basing future cleanup standards on intended use of site.
	√ Establish centralized registry of land use controls.
Voluntary cleanup program	√ Put voluntary cleanup program policies in statute, including cleanup standards that apply.
"Default" cleanup standards	√ Provide narrowly focused role for preset default cleanup sites.
State Fiscal Incentives	
Fiscal incentives to encourage and expedite cleanups	√ If orphan share funding made available, require multiyear budget of orphan share funding needs.
	√ As an option, provide grants and loans for site cleanup and grants for environmental assessments.
	√ As an option, authorize California Pollution Control Financing Authority to issue tax-exempt revenue bonds for site cleanup purposes.
Site Prioritization for Cleanup	
Prioritization of sites for cleanup	√ Require annual priority ranking of sites based on well-defined criteria, to be submitted to Legislature.
Referral of sites by Department of Toxic Substances Control to other state and local agencies	√ Require department to monitor status of sites it refers to other agencies.



report to the Legislature with a multiyear budget of funding needs.

Finally, we find that the Legislature lacks critical information to assess whether the state's resources are focused on cleaning up the highest risk sites. Under a reauthorized Superfund program, the Legislature should be provided with this information.



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This report was prepared by Mark C. Newton, under the supervision of C. Dana Curry. The Legislative Analyst's Office (LAO) is a nonpartisan office which provides fiscal and policy information and advice to the Legislature.



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