United States Government Accountability Office

GAO

Report to Congressional Requesters

February 2007

LEAKING UNDERGROUND STORAGE TANKS

EPA Should Take Steps to Better Ensure the Effective Use of Public Funding for Cleanups

GAO-07-152

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Highlights

Highlights of GAO-07-152, a report to congressional requesters

Why GAO Did This Study

Underground storage tanks that leak hazardous substances can contaminate nearby groundwater and soil. Under the Resource Conservation and Recovery Act (RCRA), tank owners and operators are primarily responsible for paying to clean up releases from their tanks. They can demonstrate their financial responsibility by using, among other options, publicly funded state financial assurance funds. Such funds function like insurance and are intended to ensure timely cleanup. These funds also pay to clean up releases from tanks without a viable owner, as does the federal Leaking Underground Storage Tank (LUST) Trust Fund.

GAO was asked to report on (1) states' estimates of the public costs to clean up known releases, (2) states' primary sources of cleanups funding and their viability, and (3) federal sources to address these releases. GAO surveyed all states and discussed key issues with EPA and selected state officials.

What GAO Recommends

GAO recommends actions for EPA to ensure that (1) tank owners maintain adequate financial responsibility coverage and (2) state assurance funds provide reliable coverage, among other things. In commenting on a draft of this report, EPA agreed with GAO's recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-07-152.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov.

What GAO Found

States estimated that fully cleaning up about 54,000 of the approximately 117,000 releases (leaks) known to them as of September 30, 2005, will cost about $12 billion in public funds. The Environmental Protection Agency (EPA) estimates that it costs an average of about $125,000 to fully clean up a release. State officials said that tank owners or operators will pay to clean up most of the remaining 63,000 releases. However, an unknown number of releases lack a viable owner, and the full extent of the cost to clean them up is unknown. A tank owner may not be viable because the owner fails to maintain adequate financial responsibility coverage, which is intended to provide some assurance that the owner has access to funds to pay for cleanups. While 16 states require annual proof of coverage, 25 states check owners' coverage less often or not at all. Furthermore, 43 states expect to confirm about 16,700 new releases in the next 5 years that will require at least some public funds for cleanup.

States reported that they primarily use financial assurance funds to pay the costs of cleaning up leaks. States reported that they spent an estimated $1.032 billion from financial assurance funds to clean up tank releases in 2005. Overall, fund revenues totaled about $1.4 billion in 2005, of which about $1.3 billion came from state gasoline taxes. The assurance funds in the 39 states for which GAO has information held an estimated $1.3 billion as of September 30, 2005, according to state officials. However, many states also use these funds to clean up releases from sources other than underground tanks. Several state assurance funds may lack sufficient resources to ensure timely cleanups. While EPA monitors the status of state funds, its method of monitoring the soundness of these funds has limitations. Furthermore, there are concerns that, by paying the bulk of the cleanup costs, state financial assurance funds may provide disincentives for tank owners—who pay only a relatively small deductible—to prevent releases.

In addition to their own funds, states employ resources from the LUST Trust Fund, the primary federal source of funds for cleaning up releases from underground storage tanks. As of September 30, 2005, the fund balance was about $2.5 billion. For fiscal year 2005, the Congress appropriated about $70 million from the fund to help EPA and the states clean up releases and to oversee cleanup activities. EPA distributed about $58 million of this amount to the states to investigate and clean up releases and conduct enforcement efforts, among other actions. To distribute LUST Trust Fund money among the states, EPA uses a formula that includes a base amount for each state and factors to recognize states' needs and past cleanup performance. However, although the LUST Trust Fund provides funds to states to assist in addressing releases from tanks without a viable owner, EPA has not incorporated this factor into its formula. Furthermore, EPA's information on states' performance comes from state reports; however, GAO found that some of the information in these reports is inaccurate and inconsistent.

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Abbreviations

DCI	data collection instrument
EPA	Environmental Protection Agency
LUST	Leaking Underground Storage Tank
MTBE	methyl tertiary-butyl ether
RCRA	Resource Conservation and Recovery Act
UST	Underground Storage Tank

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Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, D.C. 20548

February 8, 2007

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
House of Representatives

The Honorable Hilda L. Solis
House of Representatives

Underground storage tanks that leak petroleum or other hazardous substances can contaminate nearby soil and groundwater, which serves as the source of drinking water for nearly half of all Americans. Individuals coming into contact with this contamination, which can contain known carcinogens, could experience health problems ranging from nausea to kidney or liver damage. According to the Environmental Protection Agency (EPA), about 450,000 releases from underground storage tanks had been confirmed in the 50 states and the District of Columbia between 1985 and September 30, 2005—the most recent year for which comprehensive data were available.[1] In the past 20 years, EPA and states have spent over $10 billion in public funds to clean up these releases. Despite these efforts, as of September 30, 2005, over 100,000 releases had not yet been fully cleaned up.

In 1984, the Congress amended the Resource Conservation and Recovery Act (RCRA) to require EPA to develop release detection, prevention, and cleanup regulations that apply to owners and operators of underground storage tanks. In response, EPA began developing the Underground Storage Tank (UST) program in 1985 to prevent releases of petroleum and hazardous substances into the environment, detect releases when they occur, and clean up any contamination from a release. Under RCRA, tank owners and operators must register with a designated state or local agency underground tanks that store petroleum or hazardous substances. EPA and the states then track and regulate these tanks. EPA's UST Program is primarily implemented by the states; EPA maintains responsibility for program implementation on lands owned by Indian tribes and in Idaho because that state does not have the necessary laws in place. EPA also

[1]EPA defines a confirmed release as an incident where a release has been identified and reported to the state (or other designated implementing agency), which has in turn verified the release.

maintains responsibility for taking enforcement actions in New York because the state lacks the necessary laws. EPA's primary role has been to provide national guidance, assistance, and leadership to aid the states in implementing their programs.

Under RCRA, owners and operators of tank systems are primarily responsible for funding the cleanup of releases from underground storage tanks. However, under some circumstances, such as where an emergency exists, EPA or a state may pay for the cleanup and then seek reimbursement from the responsible private party. In order to operate, owners and operators must demonstrate that they have access to resources to meet their financial responsibility to cover cleanup costs. Owners and operators may use a variety of assets to meet this financial responsibility, including letters of credit, commercial insurance, and other options.

Some states have established EPA-approved state assurance funds that, like commercial insurance, are another means by which owners and operators can demonstrate their financial responsibility coverage. While the circumstances vary under which states use these funds to clean up releases, state financial assurance funds—like commercial insurance—typically pay cleanup costs either directly to cleanup contractors or by reimbursing tank owners and operators for some or all of the expenses of cleaning up leaking tank sites in return for the payment of a deductible amount. In addition to assisting known, solvent owners and operators with cleanup costs in this manner, some state financial assurance funds also pay the costs to clean up releases from tanks for which the owners or operators are not "viable"—that is, they are unknown, unwilling, or unable to perform the cleanup. States typically raise money for the funds through gasoline taxes paid by the public and tank registration fees paid by tank owners or operators.

Finally, the federal government—through the Leaking Underground Storage Tank (LUST) Trust Fund, which was established in 1986 amendments to RCRA—also provides public funding to ensure that releases from tanks are cleaned up. The LUST Trust Fund provides money to states for (1) overseeing and enforcing cleanup actions taken by a tank owner or operator and (2) cleaning up leaks at tank sites, including those without a viable owner, or at sites that require emergency action. The fund is capitalized through a $0.001/gallon excise tax on gasoline and other motor fuels and the interest that accrues to the fund balance annually. The Congress annually appropriates amounts from the LUST Trust Fund to EPA, which in turn distributes the majority of the funds to help states that

have entered into cooperative agreements with the agency to implement their cleanup programs.

In this context, you asked us to determine (1) states' estimates of the cost in public funding from state and federal sources to clean up known releases from underground storage tanks, (2) states' primary sources of funding for addressing these releases and the sources' future viability, and (3) the funding available from federal sources to address these releases. For the purposes of this report we defined public funding as including any funding controlled and/or provided by state and federal agencies, such as funds from the federal LUST Trust Fund, state financial assurance funds, and other funds appropriated by states to pay for cleanup that would not otherwise occur.

To obtain estimates of the cost to the public to clean up known releases, we surveyed state officials responsible for underground storage tank programs or, where applicable, managers of state cleanup funds, in the 50 states and the District of Columbia. Only one state, South Dakota, did not respond to our survey. Through the survey, we gathered state officials' estimates as of September 30, 2005, of the current number of known releases that have not yet been cleaned up, the number of releases that will require public funding to clean up, and the amount of public funding these cleanups will require. We also relied on our survey to gather information about state sources of funding used to address releases, the status of these sources, and their future viability. Because of differences in the time frames used by states to answer certain survey questions, we refer to data from such questions as 2005 data in this report. We asked a series of questions in the survey to allow us to assess the reliability of the information provided by states. We determined that the survey data are sufficiently reliable as they are used in the body of the report (i.e., to be presented in aggregate, as testimonial evidence). The survey data presented in appendix II are not reliable for state level comparisons but are presented to illustrate the range of state responses and associated reliability issues. We also interviewed officials from eight states—Florida, Iowa, New Jersey, Ohio, Texas, Pennsylvania, South Carolina, and Utah—to gather additional information regarding their sources of cleanup money, among other issues. To obtain information about the funding available from federal sources, we interviewed Department of the Treasury officials responsible for managing the LUST Trust Fund and gathered documentation regarding the balance of the fund, annual revenues and expenditures, and appropriations of money to EPA. We also interviewed EPA officials to learn how money from this fund flows from EPA to individual states. To gather additional information about state

and federal funding available to address releases, we conducted interviews with regional program officials from EPA's UST program in six EPA regions—those regions based in Boston, Philadelphia, Atlanta, Chicago, Dallas, and Denver. We selected these regions primarily because survey responses from one or more states in these regions raised questions about similar data they had reported to EPA. A more detailed description of our scope and methodology is presented in appendix I; selected data on underground storage tanks reported by states are summarized in appendix II; and a copy of our survey instrument is included as appendix III. We conducted our work from June 2005 to December 2006 in accordance with generally accepted government auditing standards.

Results in Brief

The cleanup of known releases from leaking underground storage tanks could take years to complete, and states reported that it would cost around $12 billion in public funds from state and federal sources. This amount reflects states' estimates of public cleanup costs for about 54,000 of the approximately 117,000 known releases that states reported had not yet been fully cleaned up as of September 30, 2005. Tank owners or operators will pay to clean up the majority of the remaining 63,000 known releases, according to state officials. However, an unknown number of releases lack a viable owner to pay cleanup costs. Some of these releases may lack a viable owner because the tank owner or operator failed to maintain adequate financial responsibility coverage. While 16 states require annual proof that tank owners or operators are maintaining the required coverage, the remaining states generally reported that they check this coverage less often or not at all, even though coverage may change on an annual basis. Without regular monitoring that tank owners or operators are maintaining their required coverage, this coverage may lapse, potentially making the owner or operator nonviable and, in the event of a release, may result in the need to use public funds to ensure timely cleanup. For example, according to Florida officials, the state has cleaned up about 350 sites annually in past years using public funding. Of this number, approximately three or four sites per year involve responsible parties that did not maintain adequate financial responsibility coverage. Finally, in addition to the costs associated with currently known releases, states expect to spend public funds in the future to clean up substantial numbers of releases that are not yet known but which states project they will identify within the next 5 years. State officials from 43 states reported—primarily based on historical trends—that they expected to identify an estimated 16,700 new releases in the next 5 years requiring at least some public funds for cleanup. However, states expect that, overall, the proportion of releases cleaned up using public

funds will decline in the future, indicating that they expect a higher proportion of owners or operators to use private sources of financial responsibility coverage to pay for cleanups.

States reported that they primarily use state financial assurance funds to pay the costs of cleaning up leaks from underground storage tanks, but they said that several of these funds may not have sufficient resources to ensure timely cleanups. State officials reported that $1.032 billion—or 96 percent of the estimated $1.076 billion from all state sources used to clean up tank releases in 2005—came from state financial assurance funds. Overall, states reported that revenues for these funds totaled about $1.4 billion in 2005, of which approximately $1.3 billion came from some form of state gasoline taxes paid by consumers. State financial assurance funds in the 39 states for which we have information collectively held an estimated $1.3 billion as of federal fiscal year-end 2005, according to state officials. Because many state assurance funds also pay to clean up releases from other types of tanks—such as aboveground storage tanks—the entire $1.3 billion balance may not be available for cleaning up releases from underground storage tanks. While state financial assurance funds can provide large amounts of money for cleaning up these releases, several states reported that their financial assurance funds do not have sufficient resources to ensure that these cleanups are performed in a timely manner. This is a concern because the longer pollution from releases is left in place, the greater the potential for it to spread, further putting human health and the environment at risk. While EPA monitors whether state financial assurance funds can continue to pay for cleanups in a timely manner, its recently developed monitoring tool has had limited usefulness to date, according to agency officials. A more effective system for monitoring the soundness of state funds could give EPA greater assurances that these funds are able to pay for or support timely cleanups of releases. Furthermore, by allowing owners and operators to pay only a small portion of the cleanup costs as their deductible, state financial assurance funds might provide a disincentive for tank owners to prevent releases from their tanks, thereby increasing the burden on already inadequate balances in some states' funds.

The LUST Trust Fund is the primary federal source of funds for cleaning up releases from underground storage tanks. From its inception in 1986 through September 30, 2005, the fund balance had grown to $2.5 billion. For fiscal year 2005, the Congress appropriated about $70 million from the fund. EPA distributes most of the annual appropriations to support the states' cleanup programs and retains the balance to cover its own

management expenses. States use LUST Trust Fund money for a variety of purposes, including investigating releases, conducting enforcement actions directed at responsible parties, cleaning up the releases, and paying administrative and planning expenses directly related to these activities. In fiscal year 2005, EPA distributed about $58 million from the LUST Trust Fund to the states, an average of $1.2 million each. The annual trust fund distributions generally represent a relatively small part of many states' cleanup program revenue. In fiscal year 2005, the states spent about 42 percent of their LUST Trust Fund money on administrative activities, 34 percent on site cleanups, and 24 percent on enforcement, according to EPA. In distributing the annual appropriation, EPA uses a formula that includes a base amount for each state and factors designed to recognize states' needs and past performance in cleaning up releases. Although one purpose of the LUST Trust Fund is to help fund cleanups of releases from tanks without a viable owner, the EPA formula for distributing the annual appropriations does not include this factor. The states do not provide EPA with separate data on tanks without a viable owner as an input to this formula. Furthermore, EPA develops information on states' needs and performance from states' semiannual activity reports on their tank numbers and cleanup activities. However, we found that some of the information in these reports is inaccurate: for example, reports of two states included estimated rather than actual data; some states are unsure of how EPA defines the categories of information to be reported, and thus they are unsure they are reporting the correct information; and at least one state reports release data covering both tanks included in EPA's UST program as well as other types of tanks. Unless EPA obtains accurate information from states on tank numbers and cleanup activities—in particular, data on releases from tanks without a viable owner—and uses this information in its formula for allocating funds, it cannot ensure that LUST Trust funds are distributed to states with the most pressing cleanup needs that require timely cleanups to protect human health and the environment.

We are recommending that EPA take steps to (1) ensure that states verify tank owners' financial responsibility coverage on a regular basis, (2) improve the agency's oversight of the solvency of state assurance funds, (3) assess the relative effectiveness of options for financial responsibility coverage, and (4) better focus how EPA distributes LUST Trust Fund money to the states. In commenting on a draft of this report, EPA agreed with our recommendations and provided information on the agency's plans and activities to address each of them.

Background

The 1986 amendments to RCRA established the LUST Trust Fund to, among other things, finance the cleanup of petroleum releases from underground storage tanks. Until recently, states could use these funds only for cleanup and related administrative and enforcement activities. Within this restriction, trust fund money could be used for the following general categories of activities:

- testing tanks for leaks when one is suspected;
- investigating a site to evaluate the source and extent of petroleum contamination;
- assessing the number of individuals that may have been exposed to petroleum contaminants and the seriousness of exposure, and estimating resulting health risks;
- cleaning up contaminated soil and water;
- providing safe drinking water to residents at the site of a tank leak;
- providing for temporary or permanent relocation of residents; and
- providing reasonable and necessary administrative and planning expenses directly related to these activities.

The Energy Policy Act of 2005 (the 2005 Act), enacted in August 2005, expanded the permitted uses of the LUST Trust Fund. It authorizes states to use a portion of their LUST Trust Fund money for inspections and other leak prevention purposes. Furthermore, the 2005 Act authorizes appropriations from the LUST Trust Fund through fiscal year 2011 of $555 million per year for a variety of activities—including release prevention and inspections—in addition to previously authorized purposes. This annual amount includes $200 million for cleanups of releases from leaking underground storage tanks; $200 million for the cleanup of releases of oxygenated fuel additives from such tanks; $100 million for activities including onsite inspections, groundwater protection, and enforcement; and $55 million for delivery prohibition, operator training, and release prevention and compliance. An additional $50 million per year is authorized from the general fund to cover administrative expenses and other activities. Net revenue to the LUST Trust Fund from taxes on petroleum products totaled approximately $190 million in fiscal year 2005.

The 2005 Act also included several other provisions regarding inspections, operator training, and financial responsibility, among other things. Some of these provisions impose ongoing requirements on states. For example, the inspection provision requires each state receiving federal funding to inspect all of its regulated underground storage tanks at least once every 3 years, beginning after the state has inspected tanks that have not been inspected since December 1998.

Effective February 2007, the 2005 Act directs EPA to require that each state receiving federal funds either (1) require additional, or secondary, structures that would help contain a release (secondary containment) for new and replaced underground storage tanks located near sources of drinking water or (2) require evidence of financial responsibility for tank manufacturers' and installers' certification. This coverage would provide for the costs of cleanup directly related to releases caused by improper tank manufacture or installation. The 2005 Act also extended until 2011 the tax on petroleum products that capitalizes the federal LUST Trust Fund.

Under EPA policy, except in rare circumstances and in Indian Country, states will address underground storage tank releases that are financed by the LUST Trust Fund under an appropriate cooperative agreement with EPA. EPA will undertake a cleanup only when (1) there is a major public health or environmental emergency, (2) the state is unable to respond, and (3) no responsible party is able or willing to provide an adequate and timely response. In these circumstances, EPA's involvement is to be limited to stabilizing the immediate situation, with the expectation that further cleanup will be conducted by the state under its cooperative agreement with the agency. States are responsible for overseeing cleanup work performed by the party responsible for the contamination and for performing the cleanup at sites where no responsible party can be found.

In addition to the LUST Trust Fund, federal money from EPA's Brownfields program can be used to clean up sites contaminated by petroleum under certain circumstances. In general, Brownfields grants are limited to sites whose "expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Only certain governmental organizations, nonprofit organizations, and nonprofit educational institutions are eligible for Brownfields cleanup grants. In fiscal year 2005, EPA provided eligible entities with about $22.3 million in Brownfields grants for cleaning up sites contaminated with petroleum. About $4.0 million of these grants were

awarded for direct cleanup work, $13.3 million for site assessments, and $5.0 million for revolving loan fund programs.

According to data collected from the states and reported by EPA, EPA and states have made progress in cleaning up releases from underground storage tanks. These data show that of the almost 450,000 releases confirmed as of fiscal year-end 2005, cleanups had been initiated for about 93 percent and completed for about 74 percent. Table 1 shows key tank-related data elements reported by EPA as of September 30, 2005, and provides definitions for those data elements.

Table 1: Key Data on Underground Storage Tanks in the 50 States and the District of Columbia, as of September 30, 2005

Tank-related data element	Definition	Number
Tanks		
Active tanks	Active, federally regulated underground storage tank systems registered with the state.	645,990
Closed tanks	Federally regulated underground storage tanks that have been reported to the state as being closed permanently.	1,607,462
Releases		
Confirmed releases	Incidents where a release has been identified and reported to the state/local or other designated implementing agency, which has in turn verified the release.	449,779
Cleanups		
Cleanups initiated	Confirmed releases at which the state or responsible party has evaluated the site and initiated cleanup activity, or determined that no cleanup action is necessary.	419,919
Cleanups completed	Confirmed releases where cleanup has been initiated and where the state has determined that no further actions are currently necessary to protect human health and the environment.	331,562
Status of cleanup backlog		
Cleanups ongoing	Confirmed releases where cleanup has been initiated but not yet completed.	88,357
Cleanups not yet started	Confirmed releases where cleanup has not yet been initiated.	29,860

Source: GAO analysis of EPA data.

As cleanups have progressed, methyl tertiary-butyl ether (MTBE)—a gasoline additive designed to reduce emissions and raise octane—has continued to be detected in groundwater used for drinking water supplies. In some cases, MTBE was added to gasoline to fulfill requirements set in the 1990 Clean Air Act Amendments to reduce certain types of emissions. However, because MTBE dissolves easily in water and does not cling to soil

very well, it migrates faster and farther through the ground than other gasoline components, thus making it more likely to contaminate public water systems and private drinking water wells. MTBE's health effects have not been conclusively established, but the federal government has determined it to be a potential human carcinogen. The effects of exposure to MTBE include headaches; eye, nose, and throat irritation; coughs; nausea; dizziness; and disorientation. Low levels of MTBE can make drinking water supplies undrinkable due to its offensive taste and odor. Because of uncertainties about MTBE's health effects, EPA has not set a national standard for MTBE in drinking water. Some states have set their own limits on allowable levels of MTBE in drinking water, and some have banned its use in gasoline sold in the state. The Congress also took action through the 2005 Act to reduce the use of MTBE in gasoline by eliminating the requirement from the 1990 Clean Air Act Amendments that led to the use of MTBE to reduce emissions.

Future Public Costs for Cleaning Up Leaking Underground Storage Tanks May Be Substantial

States reported that completing the cleanup of approximately 54,000 known releases from leaking underground storage tanks would likely require substantial amounts of public funds from state and federal resources. The public cost of cleaning up releases from tanks without a viable owner, as well as the number of releases in states' cleanup backlogs that lack a viable owner, is not fully known. In addition to the costs associated with known releases, states expect that they will use public funds to clean up a substantial number of releases that they identify within the next 5 years.

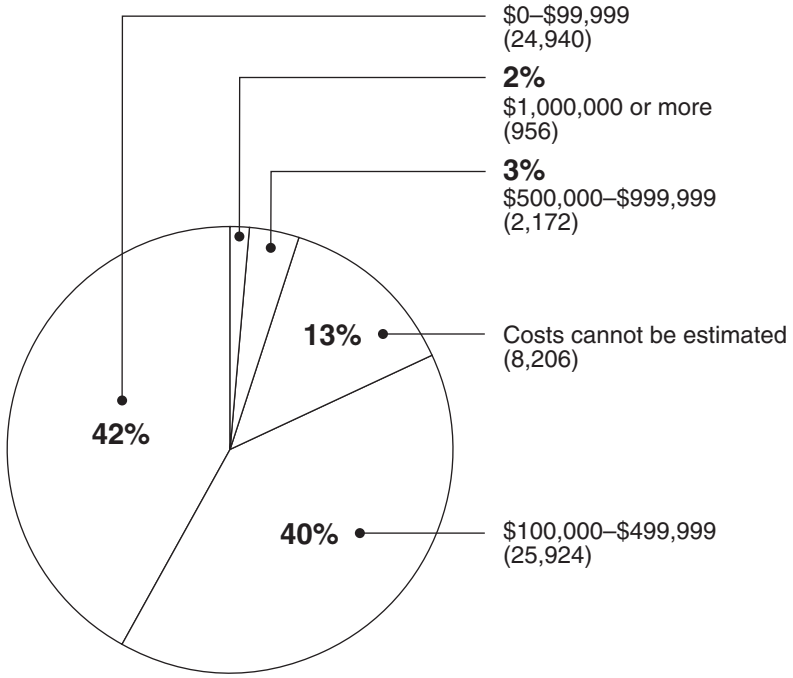
States Reported That They Expect to Spend an Estimated $12 Billion in Public Funds to Complete the Cleanup of about 54,000 Known Releases

States reported that cleaning up known releases from leaking underground storage tanks would cost an estimated $12 billion in public funds from state and federal sources.[2] This estimate reflects the amount of public funds that states expected it would cost to clean up approximately 54,000 known releases. States were unable to estimate the cost of cleaning up more than another 8,000 releases whose cleanup will require at least some public funds.[3] We asked states to exclude from their estimates any money spent prior to September 30, 2005, to clean up these releases. As figure 1 illustrates, states reported that a substantial amount of the public costs to clean up these releases had not yet been incurred.

[2]To calculate the estimated cost to complete the cleanup of known releases that require at least some public funds, we first provided states with four cost ranges ($0 - $99,999, $100,000 - $499,999, $500,000-$999,999, $1,000,000 or more). Second, we asked them to divide the number of releases in their state for which cleanup costs will be paid with some amount of public funds among these four cost ranges. Third, we multiplied the total number of releases in each range by the midpoint of the range in order to get a total cost for releases in each range. For the top range, we used $1,000,000 as the midpoint. Finally, we summed the total costs for each range.

[3]Additionally, officials in New York reported 375 releases that would be cleaned up using public funding, but they did not respond to the question about the cost of cleaning up these releases.

Figure 1: States' Estimates of Expected Future Public Costs to Fully Clean Up Known Releases



Source: Responses to GAO's survey of tank program and/or state fund managers.

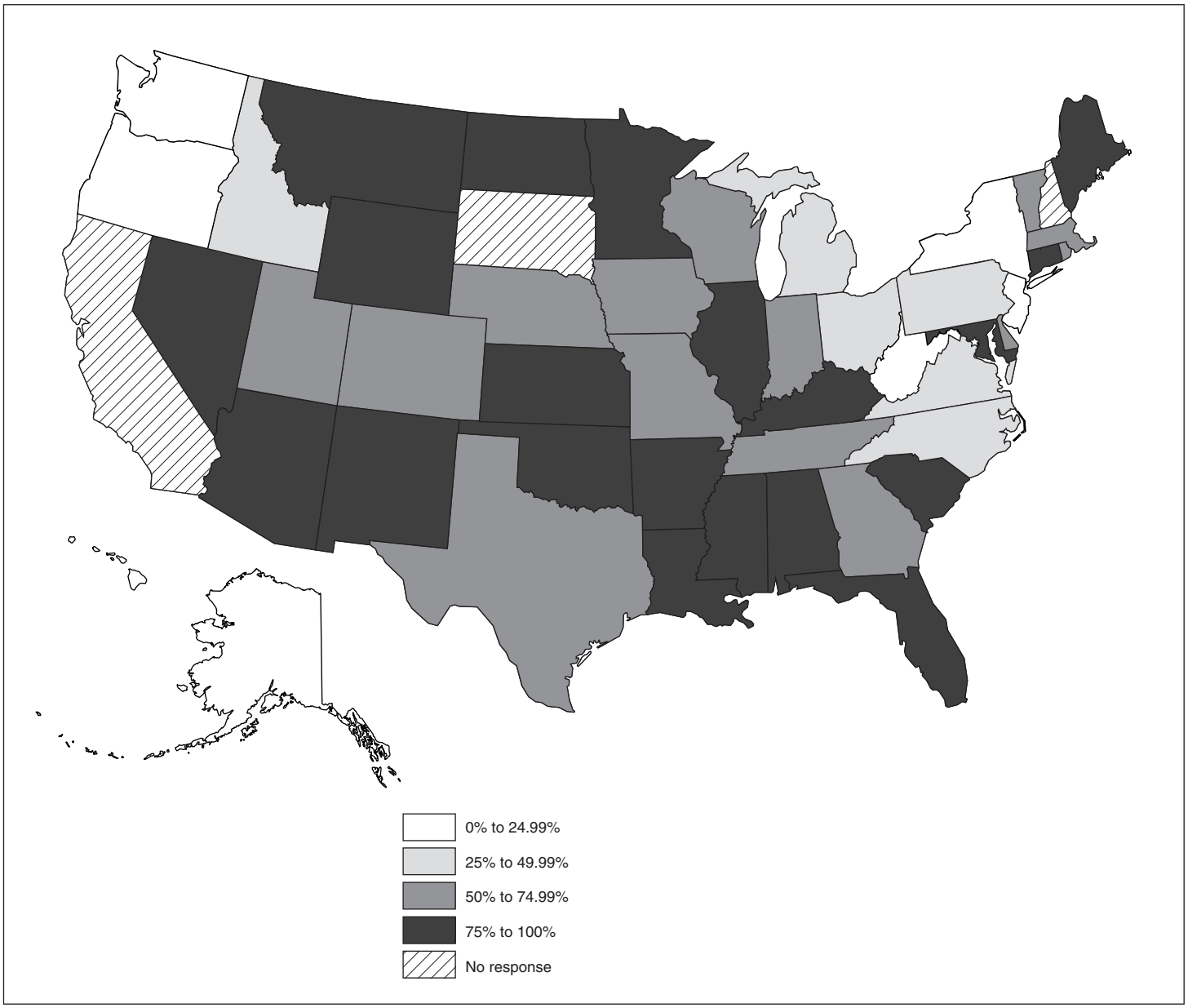
Note: This figure includes only releases that states indicated would be cleaned up using some public funds. New York officials did not respond to this question. South Dakota officials did not respond to our survey.

States reported that nearly half of these releases will require $100,000 or more to fully clean up, with about 5 percent requiring $500,000 or more. Just over half of the approximately 117,000 releases that states reported in our survey had not yet been fully cleaned up will be cleaned up using at least some public funds. Tank owners or operators will pay the entire costs to clean up another 34 percent of these 117,000 releases, according to state officials. States reported that they did not know whether any public funds would be used to clean up most of the remaining 13 percent of these releases or whether tank owners or operators alone would pay for their cleanup.

The percentage of releases that states reported would be cleaned up using at least some public funds varied widely by state, as illustrated in figure 2. Some states expected all releases in their backlogs to be cleaned up using

at least some public funds, while other states did not expect public funds to be used to clean up any releases in their current backlog.

Figure 2: States' Estimates of the Percentage of Known Releases That Would Be Cleaned Up Using Public Funds



Sources: Responses to GAO's survey of tank program and/or state fund managers, Map Resources (map).

Notes: New Hampshire officials did not provide a response to this question. California officials were unable to determine the percentage of known releases that would be cleaned up using public funds. South Dakota officials did not respond to our survey.

The approach that different states use regarding who pays for the cleanup of leaking underground storage tanks can affect the percentage of releases in a state that are cleaned up using at least some public funding. One such approach is whether a state has chosen to set up a financial assurance fund that provides financial responsibility coverage for tank owners. For example, in North Dakota, where nearly all tanks are covered by the state's fund, the state expects that more than 95 percent of releases in its current backlog will be cleaned up using at least some public funding. Similarly, state laws addressing when a specific owner or operator is considered to be responsible for a release can affect who pays for cleanups. For example, Michigan program officials previously told us that the state's causation standard exacerbates the funding problem for tanks without a viable owner because it requires that the state prove that the present owner/operator is responsible for a site's contamination before it can be held responsible for cleanup.[4] Proving responsibility becomes difficult in cases where releases have occurred in the past and ownership of the property has changed. If responsibility cannot be established, the state must then fund any cleanup of the site.

Although EPA estimates that a release costs about $125,000 on average to clean up, the cost can vary based on several factors, including the extent of contamination, the cleanup method selected, and the presence of MTBE or groundwater contamination. In our survey, we asked states about the average cost in public funds to clean up both releases with MTBE contamination and releases that have contaminated groundwater. We also asked for the average cost in public funds to clean up all releases. With regard to releases involving MTBE, EPA has reported that the additional cost for cleaning up these releases varies widely, from no additional cost to a substantial increase, depending on the history of the release. States' survey responses generally corresponded with this reported variation. Twenty-nine states reported estimates of average public costs for cleaning up releases with MTBE contamination and for all releases. Most of these states reported that cleaning up releases with MTBE contamination costs the same or more than cleaning up an average release in the state. However, estimates of the cost difference varied widely among states.

[4]GAO, *Environmental Protection: More Complete Data and Continued Emphasis on Leak Prevention Could Improve EPA's Underground Storage Tank Program*, GAO-06-45 (Washington, D.C.: Nov. 30, 2005).

EPA has stated that releases that have contaminated groundwater are generally more complicated and more expensive to clean up than releases that have not. In our survey, 34 states provided us with estimates for the average public cost to clean up all releases as well as the average public cost to clean up releases that have contaminated groundwater. States' estimates varied widely: about 60 percent of these states reported that it was more expensive to clean up releases involving groundwater contamination, while about 40 percent reported that it cost the same.

The Number of Releases from Tanks without a Viable Owner and the Public Cost of Such Releases Are Not Fully Known

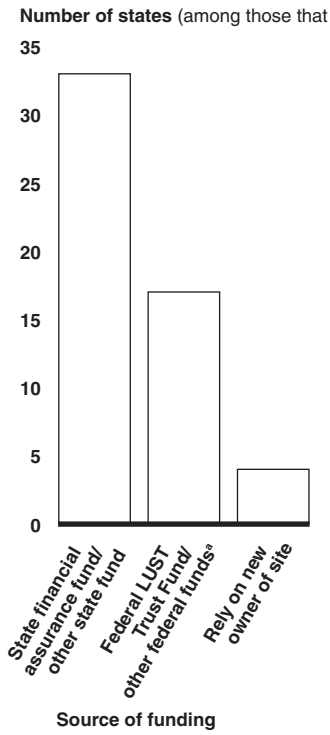
The full extent of releases from tanks without a viable owner is unknown. While states reported that about 11 percent of the approximately 117,000 releases that have not yet been fully cleaned up came from such tanks, the actual number could be much higher for two reasons. First, 11 states reported that they did not know how many of the releases in their backlogs were from tanks without a viable owner. Second, 17 states reported that there were approximately 4,000 releases from tanks for which they had not yet determined whether a viable owner exists.

The public cost of cleaning up releases from tanks without a viable owner is also not fully known. While 26 states and the District of Columbia estimated that it would cost a total of $2.7 billion to complete the cleanups of known releases from tanks without a viable owner, 21 states responded that they did not know the cost, and 2 states did not respond to the question.[5] Because most states reported that they clean up such releases using public funding, it is likely that many of the known releases from tanks without a viable owner will be cleaned up using at least some public money.

Nearly all states reported to us in our survey that they use public funding to clean up releases from tanks without a viable owner. Six states reported that they had a state fund dedicated to tanks without a viable owner, and other states without such dedicated funds primarily reported that they use resources from other types of state funds, such as financial assurance funds, or from the federal LUST Trust Fund, as illustrated in figure 3. However, four states reported that they may wait until the property on which the leaking tank is located is purchased and rely on the new owner to clean the site up.

[5]Michigan accounted for $1.7 billion of the $2.7 billion estimated cost.

Figure 3: Number of States That Use Each Source of Funding to Clean Up Releases from Tanks without a Viable Owner



Source: Reponses to GAO's survey of tank program and/or state fund managers.

Note: Some states provided more than one response. New York and New Hampshire officials did not provide a response to the question. South Dakota officials did not respond to our survey.

[a]Includes the District of Columbia.

States may have releases from tanks without a viable owner in their backlog because the owner or operator responsible for the tank failed to maintain adequate financial responsibility coverage. Maintaining adequate financial responsibility coverage ensures that money will be available to clean up releases from underground storage tanks. This money, in turn, contributes to timely completion of cleanup and thus reduces the risk to human health and the environment posed by releases that are not cleaned up in a timely manner. We asked states about the number of cases they had encountered in the past 5 years in which tank owners did not have adequate financial responsibility coverage. In responding, states used somewhat different definitions of what constituted inadequate financial responsibility coverage. In general, states that we talked with more

in-depth about financial responsibility said they counted cases as having inadequate coverage when an owner or operator either (1) had not maintained financial responsibility coverage or (2) had maintained coverage but did not have proof of coverage at the time the state requested it. Twenty-three states reported cases of inadequate coverage in the past 5 years, while only 7 states and the District of Columbia reported no cases; 19 other states reported that they did not know the number of cases involving inadequate coverage.

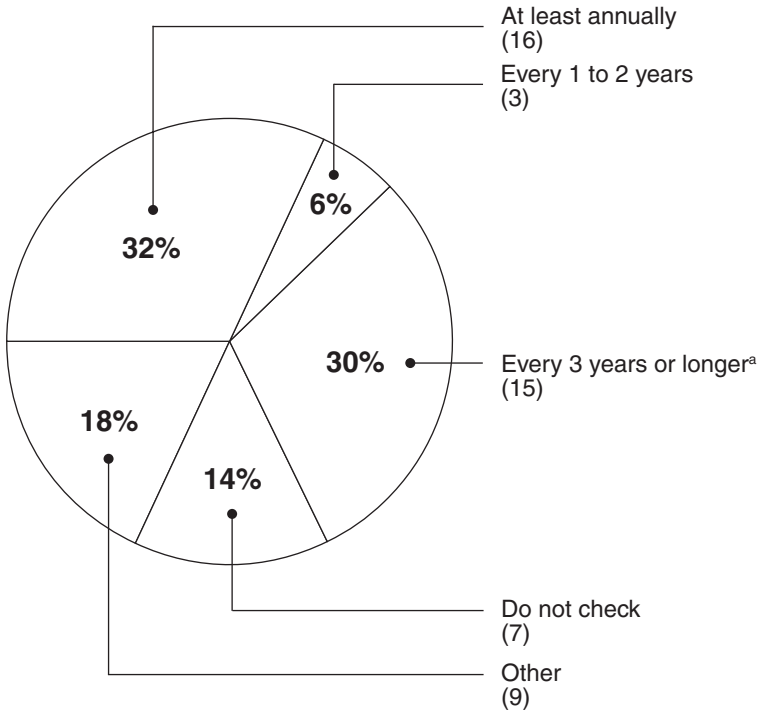
The number of cases involving inadequate financial responsibility coverage may indicate that at least some public funds will be used to clean up a release that otherwise would have been paid for by a responsible party. For example, according to Florida officials, the state has cleaned up about 350 sites annually in past years using public funding. Of these sites, approximately three to four sites per year involved responsible parties that did not maintain adequate financial responsibility coverage. In our survey, Florida estimated an average cost of $380,000 in public funds to fully address each release requiring public funds. Consequently, Florida may have spent more than $1 million per year on such sites in the past. Florida officials noted that the state attempts to recover these funds from the tank owners but indicated that such efforts have not always been successful in the past. Officials in three additional states—New Jersey, Texas, and Utah—also told us that public funds could be used in cases involving inadequate financial responsibility coverage, although they did not know the number of times public funds had been used in these types of situations in the past.

Checking financial responsibility coverage—for example, verifying during a site inspection that an owner or operator has the required paperwork to demonstrate coverage—helps to ensure that owners or operators maintain adequate coverage as required by federal law. Some options that owners or operators can choose for coverage either require annual updates or are often renewed annually. For instance, owners or operators that self-insure, or choose to demonstrate that they have sufficient assets to cover costs resulting from a release, must prepare an annual letter with financial information supporting their ability to pay. Similarly, owners or operators that choose private insurance for financial responsibility coverage must pay annual premiums to maintain coverage. However, EPA does not

provide states specific guidance on whether or how frequently states should engage in routine verification of financial responsibility coverage.[6]

Most states reported to us that they attempted to check financial responsibility coverage on a regular basis, but only about one-third of the states reported that they required annual proof that tank owners or operators were maintaining coverage. The remaining states generally reported that they checked this coverage less often or not at all (see fig. 4).

Figure 4: State-Reported Frequency of Checking Whether Financial Responsibility Coverage Is Current



Source: Responses to GAO's survey of tank program and/or state fund managers.

[6]EPA regulations require owners to report current evidence of financial responsibility in certain specific situations, such as after a release has occurred. EPA guidance notes that states may review financial responsibility submissions (1) when owners or operators submit them or (2) as part of an inspection or compliance assurance program. However, the guidance does not elaborate on how frequently states should carry out such reviews.

Notes: The "other" category includes responses such as "as events warrant," and "annual permit applications contain financial responsibility information that may be checked," among other responses. Among the seven states that do not check whether financial responsibility coverage is current, four states reported that their financial assurance funds provide such coverage for all tanks in the state. South Dakota officials did not respond to our survey.

[a]Includes the District of Columbia.

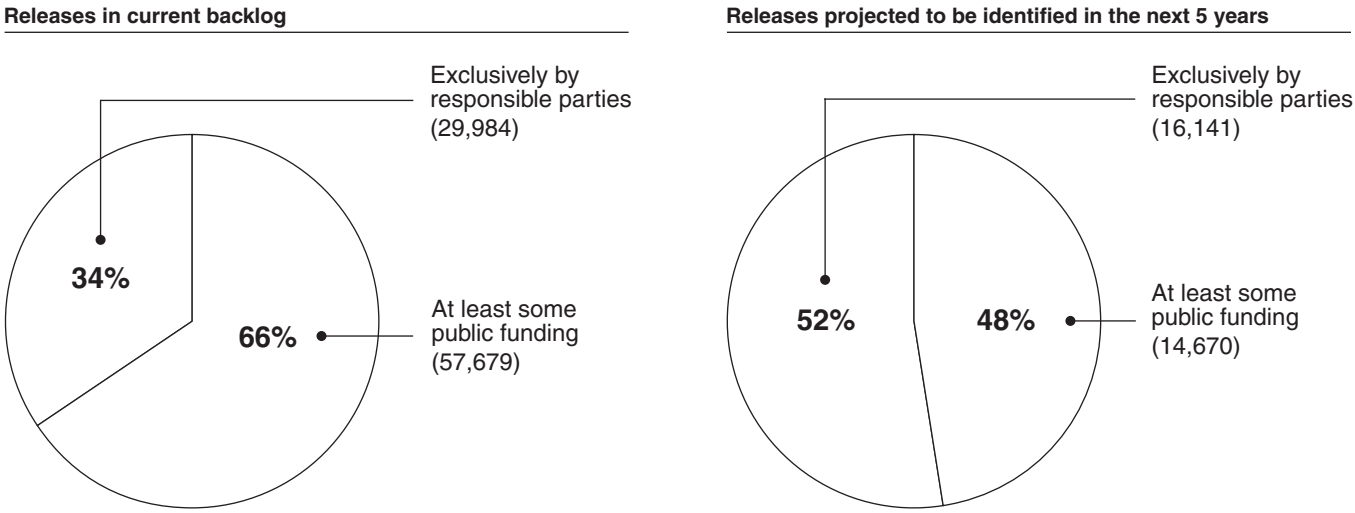
States that do not check financial responsibility coverage on an annual basis may not know if owners or operators are maintaining required coverage. For example, nearly half of the states that do not annually check financial responsibility coverage did not know the number of cases of inadequate coverage that had occurred in their state in the past 5 years.

States Anticipate Spending Additional Public Funds on Newly Identified Releases

Forty-seven states and the District of Columbia reported that they anticipate identifying about 37,000 releases over the next 5 years. Of these 48 respondents, 43 reported that they expect to spend public funds to clean up a total of about 16,700 of these releases, 2 reported no expected use of public funds, and 3 were uncertain. Thirty-nine of the 43 respondents that expected to spend public funds to clean up future releases also provided estimates of the average public cost to clean up releases in their state. Using these estimates, we determined that the total cost to clean up releases projected to be identified in the next five years in these states could be around $2.5 billion. States also reported that, overall, the proportion of releases cleaned up using public funds is likely to decline in the future. That is, together they anticipate using public funds to clean up a higher percentage of releases in their current backlog than of releases they expect to identify in the next 5 years (see fig. 5). Some states that do not use their financial assurance funds to provide financial responsibility coverage for newly identified releases, such as Florida and Arizona, expect particularly sizable declines.[7] These states expect that owners or operators will use private sources of financial responsibility coverage to pay for the cleanup of most releases identified in the next 5 years.

[7]Arizona's financial assurance fund stopped providing financial responsibility coverage after June 30, 2006.

Figure 5: States' Estimates of the Percentage of Releases in Their Current Backlogs and To Be Identified in the Next 5 Years That Will Be Cleaned Up Using Public Funds



Source: Responses to GAO's survey of tank program and/or state fund managers.

Notes: Only 43 states and the District of Columbia, whose officials responded to both questions, were included in this analysis. California, Michigan, Nevada, New Hampshire, New Jersey, and Oregon are not included. South Dakota officials did not respond to our survey.

States' responses also indicate that, together, they expect to identify somewhat fewer releases per year in the next 5 years, on average, than in 2005. Forty-seven states and the District of Columbia provided responses in our survey to questions about releases they identified in 2005 and about new releases they project they will identify in the next 5 years. In 2005, these states confirmed a combined 8,000 releases, compared with their projections of an average of about 7,400 releases per year for the next 5 years. In general, state officials told us that they based their projections on recent trends, although officials in a few states specifically noted that they expected to identify fewer releases in the future in part because of tank and equipment upgrade requirements or other prevention measures.

States Primarily Rely on Financial Assurance Funds to Clean Up Releases and Limit Cleanup Based on Funding Availability

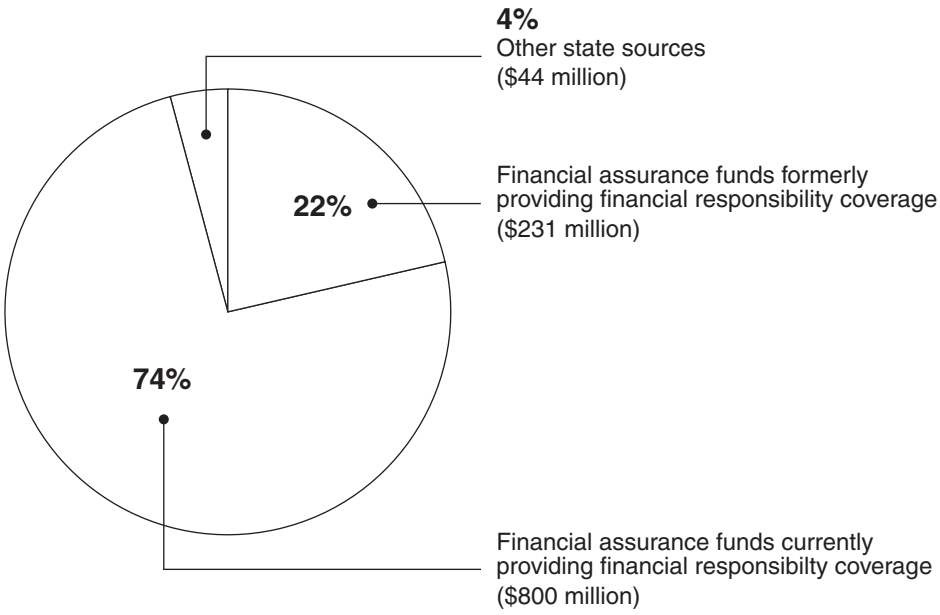
Most states use financial assurance funds to pay for cleaning up releases from underground storage tanks, with most of the revenues coming from state gasoline taxes.[8] In several of these states, financial assurance funds limit the number of cleanups they perform based on funding availability. Under EPA guidance, EPA officials are responsible for determining whether a financial assurance fund is financially sound, that is, if it provides reasonable assurance that funds are available to pay for cleanup costs. The agency recently began collecting information from states to determine the soundness of their financial assurance funds, but this effort has had limited usefulness. Lack of timely cleanup is a concern because the longer pollution from releases is left in place, the greater the potential for it to spread, further placing human health and the environment at risk.

States Clean Up Releases from Leaking Underground Storage Tanks Primarily Using Financial Assurance Funds

States reported that they primarily use financial assurance funds to pay the costs of cleaning up leaks from underground storage tanks. These funds accounted for $1.032 billion, or 96 percent, of the estimated $1.076 billion from all state sources to clean up tank releases in 2005, according to our survey results. State financial assurance funds generally pay for cleaning up releases from tanks whose owners participate in the assurance funds to satisfy federal financial responsibility requirements. Figure 6 shows the state sources of expenditures for cleanup costs in 2005.

[8]In this report we use the phrase "state gasoline taxes" to refer to any fees or taxes assessed on a per-unit basis on fuels which are made available to state financial assurance funds under state law.

Figure 6: State-Reported Expenditures from State Sources, 2005



Source: Responses to GAO's survey of tank program and/or state fund managers.

Note: Other state sources include funds dedicated to tanks without a viable owner and other state funds.

As shown in figure 6, financial assurance funds can be divided into two types: those that currently provide financial responsibility coverage, and those that used to but no longer do so. Most states have, or have had, financial assurance funds. As of September 30, 2005, 37 states had funds that met federal requirements for financial responsibility, according to EPA; an additional 6 states had such funds in the past but these funds no longer provided coverage for new releases; and 7 states and the District of Columbia have never had financial assurance funds that were approved by EPA to provide financial responsibility coverage (see fig.7).

Figure 7: Status of Financial Responsibility Coverage of State Financial Assurance Funds, as of September 30, 2005

Sources: GAO analysis of EPA data, Map Resources (map).

Note: Arizona's fund stopped providing financial responsibility coverage after June 30, 2006.

The funds in each of the six states that stopped providing financial responsibility coverage for new releases did so after a certain deadline. Tank owners and operators in these states now demonstrate financial responsibility coverage primarily through private insurance, according to state officials. However, as recently as fiscal year 2005, some of these state funds were still paying out large amounts to clean up releases. In fact, over one-fifth of states' public spending to clean up releases from underground storage tanks in 2005 came from these financial assurance funds. For example, although Florida's fund last provided financial responsibility coverage for new releases on December 31, 1998, it is still responsible for cleaning up approximately 12,000 sites, and it spent almost $150 million on cleanups in 2005. Michigan's fund, however, no longer provided financial responsibility coverage after June 1995 because it had insufficient funds to pay existing and future claims. Michigan state officials reported that several other funds provided cleanup money for underground storage tanks in 2005, including the Clean Michigan Initiative Bond Fund. This fund can be used to pay for many activities, such as waterfront improvements and cleanup of contaminated lake and river sediments.

Seven states and the District of Columbia have never had funds that provided financial responsibility coverage. In these states, tank owners and operators use other ways of demonstrating financial responsibility coverage, primarily private insurance and self-insurance, according to our survey. While they never had financial assurance funds, some of these states have provided cleanup funds to address releases from underground storage tanks. In fact, four of these states reported paying for such cleanups from state sources in 2005. Delaware, for example, reported spending $1 million in 2005 from a reimbursement fund for 240 sites. Other states assist or have assisted owners and operators with cleanup by operating insurance-type mechanisms. In the state of Washington, for example, the state's reinsurance program helps owners and operators of underground storage tanks obtain affordable pollution liability insurance by assuming part of the risk for each loss and insulating the primary insurer from losses greater than a certain amount. In the case of a $1,000,000 policy, for example, Washington's reinsurance program is responsible for settlements over $75,000. Table 2 summarizes some of the key distinctions among state approaches to ensuring that tanks are cleaned up.

Table 2: Summary of Reported State Approaches to Ensuring That Tank Cleanups Are Completed, by Status of State Financial Assurance Fund

Status of state financial assurance fund as of September 30, 2005	Number of states that spent public funds from state sources on cleanup in 2005	Number of states with owner/operators that use each method to demonstrate financial responsibility coverage			Number of states whose financial assurance fund received funding from each source	
		Financial assurance fund	Private insurance	Other private form of coverage	State gasoline taxes	Tank fees
State has a financial assurance fund that provides financial responsibility coverage (37 states)	35	29	13	19	31	18
State financial assurance fund no longer provides financial responsibility coverage (six states)	6	N/A	6	6	3	1
State never had a financial assurance fund that provided financial responsibility coverage (seven states and the District of Columbia)	4	N/A	7[a]	7[a]	N/A	N/A

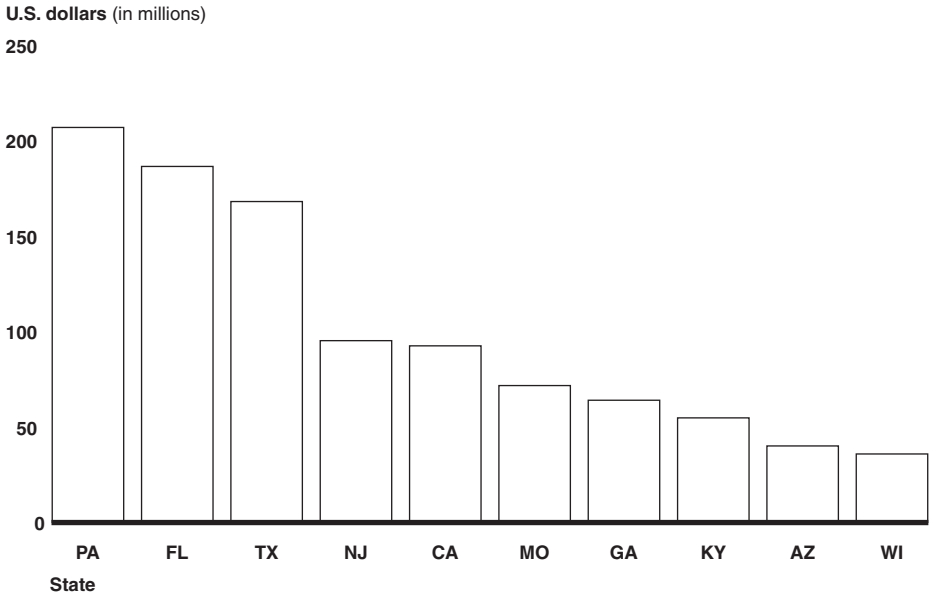
Source: Responses to GAO's survey of tank program and/or state fund managers.

Note: Certain states did not provide data for certain questions, so the information in this table may be incomplete.

[a]Includes the District of Columbia.

At federal fiscal year-end 2005, state financial assurance funds in 39 states held unexpended balances of approximately $1.3 billion, according to estimates reported by state officials. Four states did not have or did not report a fund balance. As shown in figure 8, individual states' fund balances ranged as high as about $207 million. The top five states—Pennsylvania, Florida, Texas, New Jersey, and California—accounted for more than half of the total balance in these funds. Because many state assurance funds also pay to clean up releases from other types of tanks—such as aboveground storage tanks—the entire balance of any one state's financial assurance fund may not be available for cleaning up underground storage tanks.

Figure 8: Top Ten States by Size of Reported Balance of Financial Assurance Fund, as of September 30, 2005



Source: Reponses to GAO's survey of tank program and/or state fund managers.

Notes: Given limitations in the reliability of the information reported by some states, data presented in this table should not be used to compare state programs. Financial assurance funds in Florida, Texas, New Jersey, and Wisconsin no longer provided financial responsibility coverage as of September 30, 2005.

Overall, states reported in our survey that financial assurance funds accrued revenues of about $1.4 billion in 2005 from a variety of sources. State taxes on gasoline and other fuels accounted for about $1.3 billion (92 percent) of this income to state funds. Such taxes are generally considered to be paid by the consumer. States reported that financial assurance funds also received revenues totaling about $42 million (3 percent) from fees paid by tank owners and operators. Only four states' financial assurance funds collected tank fees but not gasoline taxes in 2005, and tank fees were the primary source of revenues for only three of these funds, according to our survey. In addition to gasoline taxes and fees on tanks, states also reported small amounts of revenues from sources such as interest and cost recovery.

Whether a state financial assurance fund collects revenue from various sources in a given year can depend on its balance. Many states have maximum limits on the overall balance of their funds. Generally, if a state's maximum limit is reached, its fund ceases collecting revenues from one or

more of its revenue sources until the fund balance drops below a minimum threshold. For example, Idaho has not collected certain fees for its fund since 1998 when the balance of its fund exceeded $30 million, according to a state official. The fund will again begin collecting revenue from these fees once its balance drops to $15 million.

Some State Funds Do Not Have Sufficient Resources to Ensure Timely Cleanups

While state financial assurance funds can provide substantial amounts of funding for cleaning up releases, funds in some states may not have sufficient resources to ensure that these cleanups are performed in a timely manner. Specifically, officials in nine states reported in our survey that their funds limit the amount of cleanup work they finance based on funding availability. The situation of three such funds, as described by state officials, follows:

- North Carolina. The revenues to the state's financial assurance fund have not been sufficient in recent years to address all of the fund's high-risk sites. As of February 2006, the state was only authorizing cleanup work that the fund could pay for within 90 days.

- South Carolina. Officials generally preapprove cleanup work only at the sites where contamination is most severe. After an initial assessment of each site's contamination, the state categorizes releases into one of four categories. The most urgent category includes releases deemed emergencies, all of which were being actively cleaned up as of August 2006. The remaining categories are ranked based on how soon the release is likely to affect human health and the environment, as well as its impact on groundwater. As of August 2006, less than 40 percent of the releases in these categories were being actively cleaned up.

- Florida. Although the state's financial assurance fund stopped providing financial responsibility coverage for new releases in 1998, it is having difficulty paying for all of its cleanups. The state fund is only able to actively conduct cleanup work at about one-third of the 12,000 remaining sites. The approximately 8,000 other sites in the fund's backlog await cleanup. These cleanups will not occur until money becomes available for them, or, potentially, the risk posed by the sites increases so much that they require more urgent cleanup.

The timeliness of cleanups of releases from underground storage tanks is especially important because the longer contamination from these releases is left in place, the greater the potential becomes for the contamination to

spread. The farther these contaminants are allowed to spread, the greater the chance becomes that they will contaminate drinking water and other sensitive resources, potentially putting human health and the environment at risk. In addition, when state financial assurance funds do not pay cleanup claims on a timely basis, tank owners and operators may delay cleanups. For example, tank owners may be less likely to voluntarily report releases if they know that reporting a release could lead to a mandatory cleanup and believe that they will not be reimbursed by the state financial assurance fund for performing that cleanup for an extended period, according to an EPA regional official.

To ensure that funds are available to clean up releases in a timely and appropriate manner, state financial assurance funds must be financially sound. According to EPA guidance on the subject issued in 1993, a state assurance fund is financially sound if it provides reasonable assurance that money is available to pay for cleanup costs and other liabilities. "Reasonable assurance," according to EPA, would be evident, for instance, if the fund assets are greater than liabilities or there are sufficient resources to meet current demands, that is, the normal timing of payment of claims is not significantly delaying cleanups. If funding levels or claim processing time has a negative impact on the cleanup of releases from underground storage tanks (i.e., causing undue delays in cleaning up releases that therefore harm human health and the environment), then EPA would be concerned about the financial soundness of the fund.

State financial assurance funds may face additional challenges to remaining financially sound in coming years for the following reasons:

- Financial assurance funds may take on additional liability from tank installers and manufacturers. Effective February 2007, the 2005 Act directs EPA to require that each state receiving federal funds either implement "secondary containment" for new and replaced underground storage tanks located near sources of drinking water or to require evidence of financial responsibility for tank manufacturers and installers. In selecting the second option, states must require that any manufacturer or installer of an underground storage tank maintain evidence of financial responsibility coverage. In some cases, tank installers and manufacturers may turn to state financial assurance funds for financial responsibility coverage. While a few state funds already provide such coverage to installers, this additional liability could strain the resources of some states' funds, according to a senior official in EPA's Office of Underground Storage Tanks.

- Some states may discover more releases in the coming years than in past years. The 2005 Act requires each state receiving federal funding to inspect all of their underground storage tanks on a 3-year cycle, beginning after the state inspects tanks that have not been inspected since December 1998. For those states that currently inspect sites less frequently, the additional inspections, while intended to prevent leaks in the long term, could lead to a spike in the number of releases discovered. For example, officials in Texas told us that underground storage tank facilities in their state are inspected about every 10 years, on average. Releases in this state that may not have otherwise been found for as long as 10 years may be discovered much sooner, leading to an increase in confirmed releases over the next few years. Finding these releases sooner may mean that the contamination would be less extensive, however, and therefore any cleanup required would be less costly.

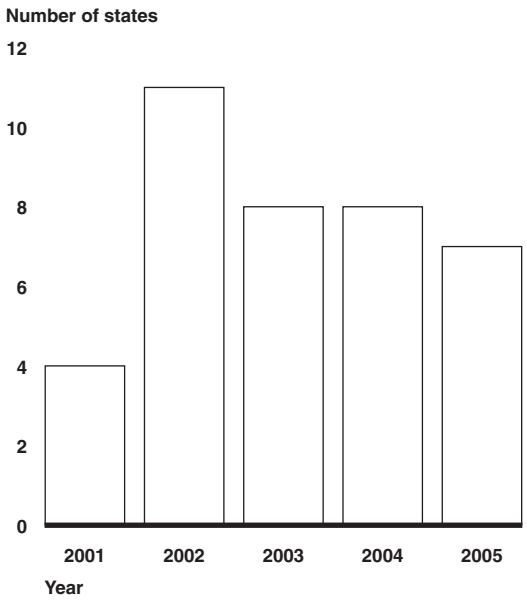
- State financial assurance funds may also be affected by future natural disasters, such as hurricanes Katrina and Rita in 2005. As late as June 2006, the impact of the flooding caused by these hurricanes on Louisiana's financial assurance fund was not yet fully known, according to a state official. If all underground storage tanks that could have been affected by the flooding turn out to have had releases, the workload of the state assurance fund would increase by 25 percent. Payouts from the state assurance fund would increase by approximately $4 million per year, according to this official.

Diversions from state financial assurance funds may also limit some states' ability to pay for cleanups under certain circumstances. States may sometimes decide to withdraw or withhold money from state financial assurance funds. Of the 43 states that have had financial assurance funds, 16 reported in our survey that they had diverted a total of nearly $435 million from their funds between 2001 and 2005.[9] Officials in most of these states reported that the diverted amounts went to the state's general fund or to offset state budget shortfalls. A few states reported using diverted funds for specific programs, such as Brownfields grants and loans, a lead-based paint removal program, and cleanup of groundwater contamination caused by sources other than leaking storage tanks. Officials we interviewed in two states where diversions occurred—Florida and South

[9]Of the total amount diverted among these 16 states, only about $18 million had been reimbursed to the state funds as of September 30, 2005.

Carolina—reported a negative impact on the state program's ability to clean up sites. In Florida, for example, $20 million was diverted in 2002. As a result, financial assurance fund managers had to adjust the threshold for cleanup, meaning that the cleanup of less urgent releases, which otherwise would have been addressed, was delayed, according to state officials. Officials we interviewed in two other states—Pennsylvania and New Jersey—did not believe that diversions had caused a significant negative impact, if any. In the largest case of a diversion reported to us, for example, the Pennsylvania financial assurance fund loaned the legislature $100 million in 2002 to balance the state's budget, according to state officials. State officials reported that this diversion did not impact the fund's operations, however, because the fund still had more than enough money to meet its current expenses. Figure 9 shows the number of states with financial assurance funds that reported to us that they had experienced a diversion between 2001 and 2005.

Figure 9: Number of States Reporting Diversions from State Financial Assurance Funds, 2001-2005



Source: Reponses to GAO's survey of tank program and/or state fund managers.

Notes: Forty-three states have had financial assurance funds that provided financial responsibility coverage. As of September 30, 2005, two states' funds had been reimbursed for portions of the original diversion.

The 2005 Act included language providing that, if a state diverts resources from its financial assurance fund, EPA may not distribute a certain portion of LUST appropriations to that state for enforcement purposes. This provision affects only the 37 states whose financial assurance funds still provide financial responsibility coverage for new releases. Officials we interviewed in Pennsylvania and South Carolina regarding this issue were uncertain about the 2005 Act's impact on future diversions in those states. A South Carolina official, for example, believed that the provisions could discourage the state from making relatively small diversions from the financial assurance fund because the loss of federal funding would more than offset the gain from the diversion. If the state needed to divert a large amount of money, even relative to the $1.3 million overall distribution it received from EPA in 2005, the disincentive would not be as significant. Two states even commented in their responses to our survey that they anticipated diversions in 2006. EPA had not developed guidance to implement these provisions of the 2005 Act as of December 2006.

Concerns have been raised about whether tank owners have incentives to prevent releases from their tanks when they can rely on state financial assurance funds to pay the bulk of the cleanup costs. Although EPA estimates that releases cost about $125,000 to clean up, on average, most state financial assurance funds charge a deductible of $25,000 or less, according to our survey. Twelve states described the circumstances under which penalties could be imposed on tank owners for multiple, or repeated, releases, in their survey responses. Officials in several states indicated that penalties were not usually imposed simply if multiple releases occurred. Rather, most states imposed penalties on the basis of evidence that the tank owner did not comply with applicable regulations or failed to report a release. For example, New Hampshire officials indicated that, while the state has authority for administrative fines and civil penalties in cases involving multiple releases, such actions are not automatically imposed. Instead, fines and penalties may be assessed if a second release results from a tank owner's recalcitrance in achieving and maintaining compliance with operational regulations. Of the 20 states that provided comments in response to our survey question regarding multiple releases, none indicated that increased penalties were imposed simply based on the occurrence of a second release.

EPA's Method of Ensuring the Adequacy of Financial Assurance Funds Has Limitations

EPA approves state financial assurance funds to provide financial responsibility coverage. According to EPA guidance, the agency can withdraw this approval if a fund no longer provides coverage that ensures timely and adequate cleanup of releases. As discussed earlier, EPA would be concerned about the soundness of a state financial assurance fund if the funding levels or claim processing time caused undue delays in cleaning up releases, thereby potentially harming human health and the environment. In Texas, for example, claims substantially exceeded revenues during the early years of the state's financial assurance fund. By 1992, the fund had a backlog of unpaid bills totaling about $170 million. This amount exceeded the fund's annual income by approximately 300 percent, and new claims arriving daily added to the backlog. In order to catch up, the fund temporarily slowed down some cleanup work. Even though the fund stopped accepting new releases after December 22, 1998, state officials expect it to remain in place at least until 2008.

EPA monitors the soundness of state financial assurance funds; this task is carried out by EPA regions, according to the agency's 1993 guidance on the subject. This guidance suggested several steps that regions could use to adequately monitor fund soundness, including (1) collecting baseline data on relevant fund soundness measures from each state, (2) evaluating the baseline soundness of each state fund, and (3) monitoring these fund soundness measures over time to check for developing problems. The guidance also specified that monitoring state funds should be accomplished as part of regions' routine oversight of state programs. Officials in four of the six EPA regions we interviewed conducted fund soundness oversight primarily by discussing the financial position of the state assurance fund with relevant state officials.

In 2005, EPA's Office of Underground Storage Tanks began collecting information from states on various aspects of their financial assurance funds. The goals of this effort included providing a better tool to monitor state financial assurance funds' soundness and helping EPA work with states to resolve any soundness issues. According to some EPA officials, however, the data collected were of limited usefulness. One region's program manager did not expect that the agency's effort would provide any new information, except data to document what he already knew. An EPA headquarters official, who is closely involved with the effort, agreed that the agency's information collection, at most, helped confirm what regions already saw as problem states. Moreover, states provided data with gaps or further clarifications needed in key areas, such as the number of release sites awaiting funding and the estimated total liabilities for underground

storage tanks. EPA regional officials described this first effort as a collection of baseline information, and the agency decided to collect data again in 2006 without changing its method. Results for 2006 were not available as of December 2006.

The 2005 Act also included language providing that EPA may withdraw approval of a state fund for financial responsibility coverage without withdrawing approval of the overall state underground storage tank program. In response, EPA has formed a workgroup to examine the issue of how to assess the soundness of state financial assurance funds and to develop criteria for guidance on the conditions under which it might withdraw fund approval, including what would constitute a lack of financial soundness. The guidance had not been made final as of December 2006.

Federal Funding Provided to Clean Up Releases from Underground Storage Tanks Is Limited

Annual appropriations from the LUST Trust Fund have averaged about $71 million in recent years. Typically, about 80 percent of the money is distributed to the states to support their cleanup programs. LUST Trust Fund money provided to states generally represents a small portion of the individual states' cleanup program budgets. In fiscal year 2005, the states used about two-thirds of their distributions to fund program administration and enforcement activities and one-third to fund the cleanup of sites.

Appropriations from the LUST Trust Fund Have Been Relatively Stable

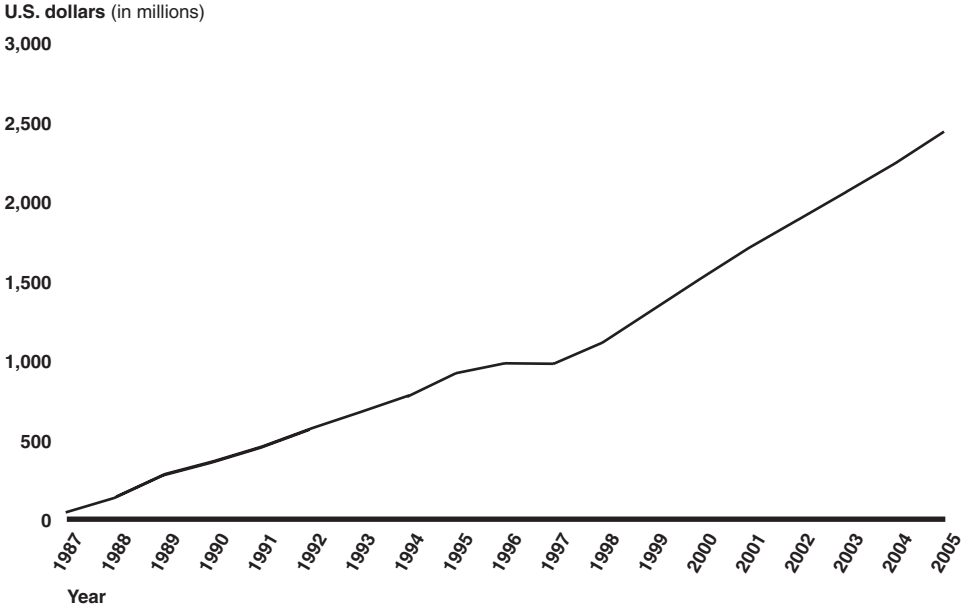
Appropriations from the LUST Trust Fund have been relatively stable since fiscal year 1998. Between fiscal years 1998 and 2005, annual appropriations from the trust fund have ranged from about $65 million to $76 million per year, averaging about $71 million per year. Over this period, EPA distributed an average of about 80 percent of the annual appropriations to states to support their cleanup programs. EPA uses the balance of the annual appropriations to support cleanup activities on Indian lands and its own cleanup-related activities. Forty-eight states reported spending about $15 million in LUST Trust Fund money on site cleanup activities in 2005, by far the largest single source of federal money for this purpose reported in our survey. Figure 10 shows the level of appropriations from the LUST Trust Fund since it began operations. As the figure shows, annual appropriations from the trust fund varied considerably in the first 10 years of the program.

Figure 10: Appropriations from the LUST Trust Fund, Fiscal Years 1987-2005

Source: GAO analysis of EPA data.

Financed by a $0.001/gallon excise tax on gasoline and other motor fuels and the interest that accrues to the fund balance annually, the balance of the LUST Trust Fund had grown to about $2.5 billion by fiscal year-end 2005. The tax has been in effect continuously since 1987, except for a short period in 1990 and the period between December 31, 1995, and October 1, 1997, when the tax had expired. Since 1987, the fund balance has been growing at an average rate of about $129 million per year. By fiscal year-end 2005, the LUST Trust Fund had collected about $3.7 billion in revenue while appropriations totaled about $1.2 billion, leaving a fund balance of approximately $2.5 billion. Figure 11 shows the changes in the trust fund balance from 1987 through 2005.

Figure 11: LUST Trust Fund Balance, Fiscal Years, 1987- 2005



Source: GAO analysis of EPA data.

From the inception of the fund through fiscal year 2005, net tax revenue to the LUST Trust Fund has averaged about $144 million per year, with interest from investments adding an average of $49 million. Net revenues in fiscal years 2001 and 2005 also included relatively small amounts expended from the fund by EPA and subsequently recovered from the parties responsible for the contamination and redeposited to the fund (see table 3).

Table 3: LUST Trust Fund Revenue, Fiscal Years 1987- 2005

Dollars in millions			
Fiscal year	**Net tax revenue[a]**	**Interest income**	**Total net revenue**
1987	$73	$1	**$74**
1988	125	10	**135**
1989	168	23	**191**
1990	122	34	**156**
1991	123	35	**158**
1992	157	31	**188**
1993	153	24	**177**
1994	152	29	**180**
1995	165	52	**217**
1996	48	60	**108**
1997	(2)	58	**57**
1998	136	61	**197**
1999	216	58	**273**
2000	181	79	**260**
2001	182	95	**276[b]**
2002	181	68	**249**
2003	184	64	**249**
2004	189	67	**256**
2005	190	78	**269[b]**
Total	**$2,743**	**$927**	**$3,671[b]**

Source: GAO analysis of EPA data.

Note: Figures may not add to total due to rounding.

[a]Net tax revenue includes income from taxes, less refunds and credits.

[b]The total also includes $40,000 in cost recoveries in fiscal year 2001 and $1,455,000 in cost recoveries in fiscal year 2005.

LUST Trust Fund Money Is a Relatively Small Part of Many States' Programs

States' revenues from the LUST Trust Fund's annual appropriations represent a relatively small part of many states' cleanup program revenue in any given year. In fiscal year 2005, EPA distributed about $58 million of LUST Trust Fund money to the states, or about $1.2 million per state. State programs spent much more than this on the cleanup portion of their programs alone. In fact, 45 states each reported spending an average of $24 million in 2005 to clean up contamination from leaking tanks. LUST Trust Fund money used for cleanup work is generally intended to pay for

cleaning up releases from tanks without a viable owner. Even when examining only this aspect of the cleanup effort, nine states reported spending amounts that far exceeded their LUST Trust Fund distribution—more than $2 million each in 2005 alone to clean up contamination from leaking tanks without a viable owner. As discussed earlier in this report, the cleanup work from such tanks that remains to be done is significant.

Distributing the annual LUST Trust Fund appropriation among the states is a two-step process. First, EPA headquarters uses a formula to determine the amount each state should receive and then divides the money among the regions based on the total for the states within each region. Second, EPA regional officials consider the components of the state formulas, along with additional factors, to determine the actual amount to be distributed to each of the states in their region. Additional factors that may be considered, according to EPA regional officials, include states' actual need for money in light of such things as funding carryovers from prior years, states' work plans, or any special projects. For the most part, the EPA regional officials whom we interviewed stated that deviations from the formula distributions, when they occur, are usually relatively minor.

The formula EPA headquarters uses to distribute LUST Trust Fund money to the regions incorporates three components: (1) a minimum distribution of $300,000 per state; (2) a need-based amount that considers the numbers of underground storage tanks and releases in the state, as well as the percentage of the population relying on groundwater for potable water; and (3) a performance-based bonus to states that meet or exceed the national averages for the numbers of cleanups initiated and completed. The distribution formula does not consider the number of releases from tanks without a viable owner in various states, nor does it consider the risk that specific releases may pose to human health and the environment. EPA develops information on states' needs and performance from states' semiannual activity reports on their tank numbers and cleanup activities. However, our survey disclosed several concerns regarding the accuracy of these reports, including the following:

- According to officials in two states, the information they report in the semiannual activity reports is based on estimates rather than actual performance. For example, a Maine official told us that the data the state reports is generated by canvassing their regional staff, and the state has found errors in the data reported in the past. A Wyoming official told us that the state tracks contaminated sites rather than

releases. Because EPA reports call for data on releases rather than sites, Wyoming provides its best estimate of release data.

- Some of the reporting problems disclosed in our survey are related to the definitions of the reporting elements. An Arizona program official told us, for example, that the program was uncertain of EPA's definition of the cleanups initiated performance measure. The state official expressed concern that the state's definition of cleanups initiated may not agree with the EPA definition. The state reports a site as "cleanup initiated" when the release has been confirmed and a case number assigned. According to the EPA definition, however, cleanup initiated requires that the state or responsible party has evaluated the site and initiated physical activity (e.g., removal or treatment of the contamination, removal of the contaminated soil, or monitoring of the groundwater or soil being remediated). Cleanup initiated should also be reported in situations where the state has evaluated the site and determined that no physical activity is necessary to protect human health and the environment.

- A Louisiana Underground Storage Tank Program official told us that a review of its files disclosed that the program had been reporting duplicate entries and releases that did not meet EPA's definition.

- An Oregon Underground Storage Tank Program Coordinator told us that, in the process of cleaning up its database information, program officials found many sites being reported that were duplicates or involved releases that did not come from regulated tanks.

- A Maryland Department of the Environment official acknowledged that it has been reporting semiannual performance data incorrectly, and as a result, some of the state's performance activities have been double counted.

- An Oklahoma Petroleum Storage Tank Division official told us that the division had been reporting performance data on all tanks regulated by the state, including the aboveground storage tanks, and also undercounting the number of "active tanks" by excluding tanks that were only temporarily out of service.

To help ensure the accuracy of the states' semiannual activities reports, EPA recommends that the regions review each state's data submission for reasonableness based on the state's prior reports and the regional program

manager's knowledge of the state's program. When any of the states' data appear questionable, the regions are asked to follow up with the states to obtain an explanation or corrected data. Our interviews with EPA regional officials indicated that they were generally following this headquarters guidance. Nevertheless, in some cases regional officials were not aware of reporting problems with the states in their regions that our survey disclosed. To ensure that states properly understand EPA's definition of the data reporting elements, at least one EPA region reminds its states of the EPA definitions each time a semiannual activity report is due. Other regions we interviewed were less proactive, essentially relying on informal discussions, the experience of the state officials, or the posting of the definitions on the EPA Web site.

EPA also aggregates elements of the states' semiannual activity reports to measure program performance against the national goals it establishes in accordance with the Government Performance and Results Act. For fiscal year 2005, EPA's goals for the underground storage tank program included (1) completing 14,500 cleanups, (2) completing 30 cleanups in Indian Country, and (3) decreasing newly reported confirmed releases to fewer than 10,000. On the basis of the states' reports for fiscal year 2005, EPA reported that all the goals were met.

Money from the LUST Trust Fund is meant, in part, to address releases from tanks without a viable owner. In a November 2005 report, we recommended that EPA collect available information from states, in their reports to the agency, regarding the number and cleanup status of all known abandoned underground storage tanks within their boundaries.[10] This information would improve EPA's ability to determine how to most efficiently and effectively distribute LUST Trust Fund dollars to the states. Although 37 states and the District of Columbia reported numbers of releases that came from tanks without a viable owner in our survey, as of December 2006, EPA Office of Underground Storage Tanks officials stated that EPA had not yet required states to report this information because of concerns regarding the burden this might place on some states.

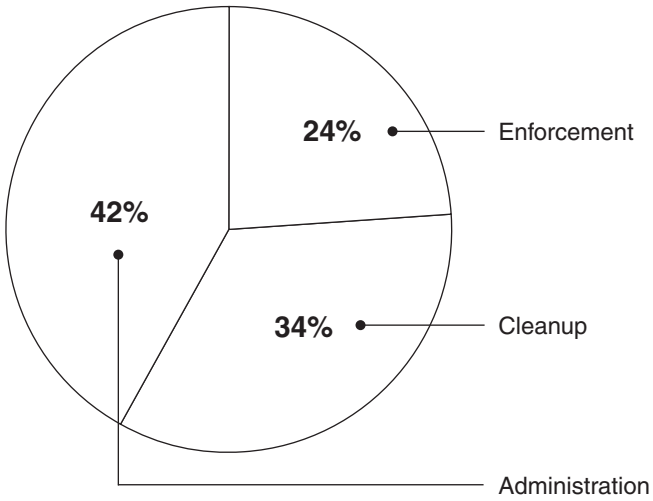
[10]GAO-06-45.

States Use LUST Trust Fund Money in a Variety of Ways to Support Their Programs

Under cooperative agreements with EPA, states receive distributions from the LUST Trust Fund to help cover the cost of administering their LUST cleanup programs. According to EPA regional officials, the states' programs are all set up differently and, under EPA guidelines, the states can decide how they will best use the LUST Trust Fund money to fit their particular program. According to EPA, over the past 10 years, on average, states have used roughly one-third of their LUST Trust Fund money for each of the following categories: (1) administrative activities, including LUST Trust Fund program management, general management and administrative support, program guidance and implementation, and training; (2) enforcement activities, including all actions necessary to identify a leaking underground storage tank site's potentially responsible party; issuance of letters, notices, and orders to the responsible parties; oversight of the cleanups; and activities associated with cost recovery actions; and (3) cleanup activities consisting largely of emergency responses, site investigations, exposure assessments, and corrective actions.

In fiscal year 2005, most of the states reported spending at least some of their LUST Trust Fund money in all three categories. However, some states focused their spending on just one or two categories. For example, 10 states reported they did not spend any of their LUST Trust Fund money on cleanup activities in fiscal year 2005. Figure 12 shows the states' use of LUST Trust Fund money by spending category.

Figure 12: States' Use of LUST Trust Fund Money by Spending Category, Fiscal Year 2005



Source: EPA data.

Regional officials told us that many states prefer to use their LUST Trust Fund money to fund staff positions rather than cleanups. For example, according to an EPA Region 5 official, although states in their region initially used their LUST Trust Fund money to perform cleanups, they soon decided that funding staff positions was more cost effective than performing the cleanup and pursuing cost recovery, which can be an expensive and time-consuming process. By funding additional staff positions rather than cleanup activities, states were often able to identify the responsible parties and force them to do the cleanups, thereby avoiding the time and expense of pursuing cost-recovery actions. A Region 6 official told us that some states view the cost recovery process as a deterrent to using the federal money for cleanup activities.[11] Because they have state money available for cleanup efforts, states can use the federal money for staff salaries. Region 8 officials noted that some states actually require the use of state money for cleanup, and thus the federal money is used for administrative or enforcement activities, particularly salaries.

[11]EPA guidance generally provides that states entering into cooperative agreements with EPA must make reasonable efforts to recover costs.

An EPA official in Region 4, however, took issue with states that do not use LUST Trust Fund money for cleanups. The EPA official stated that, in some cases, cleanups that could have been performed with the LUST Trust Fund money are not being undertaken because the money is being used for salaries. The official told us that Region 4 encourages states to fund salaries with state money so that LUST Trust Fund money can be used for cleanups; however, the official acknowledged that ultimately it is up to the states to decide how to use these federal funds, within the permitted parameters.

Conclusions

EPA generally relies on states to ensure that tank owners and operators comply with federal financial responsibility regulations, but it does not provide specific guidance to the states as to whether or how frequently they should verify financial responsibility coverage. As a result, states verify coverage according to differing schedules or not at all. Therefore, EPA lacks assurance that states are adequately overseeing and enforcing financial responsibility provisions. We found that only about one-third of states check coverage on an annual basis, while the remaining states generally reported they check less frequently or not at all. Additionally, many states could not provide information on the extent of inadequate financial responsibility in their states for the past 5 years. If states do not verify coverage on a routine basis, it may be difficult for them to know whether owners or operators will have the required coverage in the event of a release. If the required coverage is not in place when a release occurs, funds may not be available to pay for cleanup in a timely manner, thus increasing the potential for contamination to spread and damage the environment and human health. Additionally, a lack of available funds may result in taxpayers paying more of the cleanup costs than they would have otherwise paid.

In addition, EPA's method of monitoring whether state financial assurance funds provide adequate financial responsibility coverage has limitations. Unless EPA improves how it monitors the soundness of state financial assurance funds, it will not be aware of deficiencies in coverage before they occur or in sufficient time to take action to avoid funding shortages, which could delay the cleanup of releases and potentially threaten human health and the environment.

Under the principle of "the polluter pays," tank owners and operators are primarily responsible for the costs of cleaning up contamination from their leaking tanks. RCRA requires these owners and operators to obtain some

form of financial responsibility coverage to demonstrate that they have access to resources to cover cleanup costs. In response, many states developed financial assurance funds, at least in part to ensure that releases are cleaned up in a timely manner. In the event of a release, tank owners covered by these funds usually pay a relatively small deductible, while the funds provide sometimes large sums of public funding to complete the required cleanup. Because these deductibles are often small, they may not provide an incentive for tank owners to prevent releases from occurring. In addition, in many states, tank owners are using financial responsibility mechanisms other than state assurance funds. While some state funds are currently encountering difficulties paying for cleanups in a timely manner, tank owners in many states will increasingly rely on other means of financial responsibility coverage, making it important to know whether state funds or private forms of coverage are more effective in ensuring timely cleanups. EPA is ideally situated, through its existing relationship with state program officials throughout the country, to shed light on this issue.

EPA's distribution of LUST Trust Fund money to states depends on data that may not be accurate. In addition, states are not required to report data to EPA on the number of releases from tanks without a viable owner. Although one of the purposes of the fund is to help states clean up releases from tanks without a viable owner, EPA currently allocates resources to the states without taking into account the number of such releases in each state. In our November 2005 report, we recommended that EPA collect available data from the states regarding the number of tanks in each state that had no viable owners.[12] In commenting on this recommendation, EPA expressed concern about placing an undue burden on states. In our response, we explained that we were not suggesting that states should try to identify new sites that they were not currently aware of, but merely report on sites without viable owners separately from the aggregated data that they already provided to EPA. We continue to believe that such reporting would be worthwhile and would not present an undue burden to most states. In our survey, 37 states and the District of Columbia reported data on the number of tanks without viable owners that had known releases. Taking this information into account in distributing LUST Trust Fund money could encourage the remaining states to gather such information as well. In addition, developing national data on the extent to which releases remaining to be cleaned up are attributed to tanks without

[12]GAO-06-45, p. 29.

viable owners would be useful to both EPA and the Congress in assessing the future public funding needs for EPA's UST program.

Recommendations for Executive Action

We recommend that the Administrator, EPA, take the following four actions:

- Ensure that states verify, on a regular basis, that tank owners and operators are maintaining adequate financial responsibility coverage, as required by RCRA;
- Improve the agency's oversight of the solvency of state assurance funds to ensure that they continue to provide reliable financial responsibility coverage for tank owners;
- Assess, in coordination with the states, the relative effectiveness of public and private options for financial responsibility coverage to ensure that they provide timely funding for the cleanup of releases; and
- Better focus how EPA distributes program resources to states, including LUST Trust Fund money, by
  - ensuring that states are reporting information in their semiannual activity reports that is consistent with EPA's definitions;
  - encouraging states to review their databases to ensure that only data on the appropriate universe of underground storage tanks are being reported in their semiannual activity reports; and
  - gathering available information from states on releases attributed to tanks without a viable owner and taking this information into account in distributing LUST Trust Fund money to states.

Agency Comments

We provided EPA with a draft of this report for its review and comment. EPA agreed with our recommendations and provided information on the agency's plans and activities to address each of them. Regarding our recommendation that EPA ensure that states verify that tank owners and operators maintain adequate financial responsibility coverage, the agency indicated that it has issued draft guidelines that would require inspections of underground storage tanks to assess compliance with financial

responsibility requirements. Regarding our recommendation that EPA improve its oversight of the solvency of state assurance funds, the agency indicated that it would strengthen its oversight by improving a recently developed monitoring tool and by developing guidance for its oversight process. Regarding our recommendation that EPA assess the relative effectiveness of public and private options for financial responsibility coverage, the agency indicated that it would consider conducting such a study in conjunction with the states. Finally, regarding our recommendation to better focus how EPA distributes program resources to states, the agency stated that it would work toward ensuring that state-reported data are consistent with existing EPA definitions and are limited to federally regulated underground storage tanks. Also, EPA stated that it would consider changes to improve the distribution of future LUST Trust Fund money. EPA's letter commenting on our report is included as appendix IV.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the EPA Administrator and other interested parties. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or stephensonj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.

John B. Stephenson
Director, Natural Resources
and Environment

Objectives, Scope, and Methodology

The objectives of this review were to provide information on (1) states' estimates of the cost in public funding from state and federal sources to clean up known releases from underground storage tanks, (2) states' primary sources of funding for addressing these releases and their future viability, and (3) the funding available from federal sources to address these releases.

For the purposes of this review, we defined public funding as including any money controlled and/or provided by state and federal agencies—for example, money from the federal Leaking Underground Storage Tank (LUST) Trust Fund, state financial assurance funds, other state funds that have not been approved by the Environmental Protection Agency (EPA) to provide financial responsibility coverage, or money appropriated by the state to pay for cleanup that would not otherwise occur. Our definition excluded money spent by federal, state, and local government agencies to clean up releases from tanks they either own or operate—this money would be considered to be provided by the responsible party.

To address our objectives, we developed and administered a survey to state officials responsible for underground storage tank programs or, where applicable, for state cleanup funds, in the 50 states and the District of Columbia.[1] Specifically, we prepared and e-mailed a Word Electronic Questionnaire to obtain data, whether estimated or actual, from states on underground storage tanks, including the number of tanks, releases, and cleanups, and financial responsibility and funding sources for cleanups. The practical difficulties of conducting any survey may introduce nonsampling error. For example, differences in how a particular question is interpreted, the sources of information available to respondents, or the types of people who do not respond can introduce unwanted variability into the survey results. We included steps in both the data collection and data analysis stages to minimize such nonsampling errors. For example, in the research design and data collection stages, we took the following steps:

- We obtained from EPA its list of state contacts. We then attempted to contact all listed state officials via e-mail and asked them to tell us whether they or someone else in their state would be the most appropriate contact. Upon receiving this e-mail, a few officials identified more appropriate survey respondents. In states where we were not able to contact the officials on EPA's list via e-mail, we sent the e-mail

[1]See appendix III for a copy of the survey.

regarding the most appropriate contact to officials named on lists of state contacts from two other professional organizations that also conduct surveys about underground storage tanks—the New England Interstate Water Pollution Control Commission and the Association of State and Territorial Solid Waste Management Officials—and, in some cases, to officials listed on states' underground storage tank-related Web sites.[2]

- We pretested the survey with officials from four states between October 28, 2005, and December 21, 2005, and used their feedback to refine the survey. States were selected for the pretests to ensure variation in size of workload and status of the state financial assurance fund. For these pretests, we sent agency officials a draft of the survey. We then interviewed the officials to ensure that the (1) questions were clear and unambiguous; (2) terms used were precise, including our definition of public funding; and (3) data needed to respond to the questions was available to the state officials. As a result of our pretests, we made changes to some of the survey questions.

- We sent an announcement on November 18, 2005, of the upcoming survey to state contacts (including the District of Columbia) and then e-mailed the survey as an attachment on January 19, 2006. We asked respondents to return the survey by e-mail, fax, or mail by February 3, 2006. We accepted responses to the survey through mid-October 2006.

- We sent e-mail reminders and conducted follow-up telephone calls with nonrespondents.

To minimize nonsampling error in the data analysis stage, we took the following steps:

- For selected survey questions, where we were able to, we independently corroborated survey data by comparing these data with EPA data. We then followed up with states and EPA as needed about discrepancies.

- We included a series of data reliability questions in the survey to assess the accuracy of the information provided to us by the respondents.

[2]The Association of State and Territorial Solid Waste Management Officials' survey is sponsored by that organization and conducted by the Vermont Department of Environmental Conservation.

Specifically, we collected information about (1) the databases states used to provide survey data; (2) the internal controls on those databases (e.g., whether it had been reviewed for quality, the procedures to ensure accurate data entry, and known limitations); (3) whether the data provided were actual or estimates; and (4) the assumptions, data, and calculations used to provide the actual or estimated data for selected questions. We also requested supporting documentation if states noted their database(s) had been reviewed for quality.

- We used a data collection instrument (DCI) to systematically and consistently record all available data reliability information (from survey responses, published reports, or interviews) in order to make assessments of the reliability of the survey data provided by each state. The DCI was then reviewed by an independent person who assessed the accuracy of DCI data entries and the reasonableness of the judgments on the reliability of states' survey data. As expected, there was wide variability in the level of oversight of the databases states use to track underground storage tank information. There was similar variability in the ways state officials described how they arrived at responses to certain questions—whether it was based on states' "actual" data, derived estimates, or some other source. Specifically, some states provided explanations for their responses that were precise and grounded in reasonable mathematical or trend based assumptions, while others noted that their responses were educated guesses. Given the limitations in the information reported from some states, we determined that the survey data are not comparable by state, nor should they be reported using such terms as "actual" sums, budgets, or outlays. Consequently, the data are presented in the body of the report as aggregate information on what states estimate their underground storage tank and leaking underground storage tank numbers and funding to be. We report all states' responses to selected questions only in appendix II, because of the known limitations in the reliability of state level comparisons. Such data are included in appendix II because of congressional request and in order to illustrate the range of responses states provided to selected questions and the wide variance in the reliability of those responses. With these provisos, the survey data are sufficiently reliable as they are used in the body of the report (i.e., to be presented in aggregate, as testimonial evidence). The survey data presented in appendix II are not reliable for state level comparisons.

- We conducted interviews regarding data reliability with a nonprobability sample of seven states (see next page for a further discussion of this

sample of states).[3] These interviews included in-depth questions focusing on topics such as the states' database reviews and database limitations identified in their survey responses.

- We contacted state officials to clarify survey responses when necessary and used a centralized tracking document to record all changes. Changes made in the tracking document were verified against the keypunched data to ensure all changes and updates were recorded. When changes took place after a survey was keypunched, the updates were made in the computer program used to generate survey results.

- We edit-checked all surveys before they were keypunched, verified all keypunched survey data against hard copies of the surveys, and verified the computer programs used to generate survey results.

From the population of 51 state contacts who were asked to participate in our survey, we received 50 questionnaires for an overall response rate of 98 percent. We did not receive a questionnaire from South Dakota. We do not know if responses for South Dakota would have differed materially from those of the states that completed the survey.

From the responses we received, we gathered information about (1) state databases used to track underground storage tank information; (2) states' data for underground storage tank management, including data regarding active and closed tanks, confirmed releases, and cleanups initiated and completed; (3) states' sources of money for cleanup, including state financial assurance funds; (4) states' use of federal money to clean up leaking underground storage tanks; and (5) financial responsibility. We provided states with the definition of public funding described previously in this section, and we asked them to respond to all survey questions about such funding according to this definition. The survey was focused specifically on federally regulated underground storage tanks, as defined by EPA. A few states reported they were not able to provide us with data specific to federally regulated underground storage tanks for selected questions, and instead, they generally provided us with either data including a different universe of tanks or data prorated based on the number of federally regulated underground storage tanks in the state for

[3]Results from nonprobability samples cannot be used to make inferences about a population because in a nonprobability sample, some elements of the population being studied have no chance or an unknown chance of being selected as part of the sample.

these questions. Additionally, most survey questions that asked for data for a specific year referred to the federal fiscal year. If states were unable to provide data for the federal fiscal year, we asked them to provide us with the starting date of their alternative reporting year. As a result, we present such data in the report as 2005 data.

In addition to conducting a survey to address our three objectives, we also interviewed agency officials in a nonprobability sample of eight states—Florida, Iowa, New Jersey, Ohio, Pennsylvania, South Carolina, Texas, and Utah—to gather additional information regarding selected survey topics. Specifically, we talked with this group of states about topics such as their use of LUST Trust Fund money, restrictions within their state financial assurance fund on accepting claims, diversions from their state financial assurance funds, the process of phasing out their state financial assurance funds, and cases of inadequate financial responsibility coverage in their state.[4] We selected this sample of states in order to discuss as many of our topics of interest as possible within a limited number of interviews. To select the states, we first reviewed all states' responses to survey questions related to the relevant topics to determine which states would be able to discuss each topic of interest. We then calculated a score for each state based on the number of relevant topics they could discuss, as indicated by their survey responses. We interviewed all states that had scores at or above a threshold score that we determined, based on how many states we would need to discuss the relevant topics with to obtain sufficient information for the purposes of this report.

We also conducted interviews with regional program officials from EPA's Underground Storage Tank Program in six EPA regions to gather additional information about (1) states' primary sources of money for addressing releases from leaking underground storage tanks, (2) these sources' future viability, and (3) the federal funding available to address these releases.[5] We selected these regions primarily because survey responses from one or more states in these regions raised questions about similar data they had reported to EPA. We spoke with regional officials about these apparent discrepancies, as well as about the regions' processes for distributing

[4]As indicated previously, we also discussed data reliability with seven of these states. We did not discuss data reliability with officials in Utah.

[5]Regions 1, 3, 4, 5, 6, 8, based in Boston, Philadelphia, Atlanta, Chicago, Dallas, and Denver, respectively.

money from the LUST Trust Fund, states' use of LUST Trust Fund money, and the solvency of states' financial assurance funds.

To obtain further information about the federal funding to address these releases, we interviewed Department of the Treasury officials responsible for managing the LUST Trust Fund, interviewed EPA headquarters and regional officials to determine the process by which EPA distributes LUST Trust Fund money, and gathered documentation regarding appropriations of money from the fund to EPA, states' expenditure of fund money, and the balance of the fund and its annual revenues. The documentation we gathered included (1) annual apportionment letters, which we used to track appropriations of LUST Trust Fund money to EPA; (2) EPA Spending Reports, which we used to track state expenditures of LUST Trust Fund money; and (3) Treasury's LUST Trust Fund Financial Statements, which we used to track the fund balance and revenues collected into the fund. We selected these sources based on EPA officials' indications that they were the most appropriate sources for the purposes of this report. For Treasury's LUST Trust Fund Financial Statements, we obtained and reviewed relevant documentation on their reliability, including copies of audits of Treasury's financial statements and internal controls. These audits were conducted in accordance with generally accepted government auditing standards. We also discussed the reliability of Treasury's LUST Trust Fund data with knowledgeable EPA and Treasury officials. We found the data elements that we used in this report from Treasury's financial statements sufficiently reliable for the purposes of this review.

We conducted our work from June 2005 to December 2006 in accordance with generally accepted government auditing standards.

Selected Data Relating to Underground Storage Tanks Reported by States

As described in appendix I, our assessment of the reliability of the data provided by states in their surveys found wide variability in the level of oversight of the databases that states use to track underground storage tank information, and similar variability in the ways state officials described how they arrived at responses to certain questions. For the purposes of this report, we have divided states into three relative categories, according to our assessment of the reliability of their survey responses: (1) 17 states generally reported having fairly recent data quality reviews, several internal controls on the data, no significant data quality problems, and provided fairly precise and mathematically grounded explanations for their calculations; (2) 26 states and the District of Columbia generally reported having some internal controls on the data, and/or some data quality problems, and/or provided a mix of "guesses" and fairly precise explanations of their calculations; and (3) 6 states generally reported having few, if any internal controls on the data, and/or significant data quality problems, and/or didn't provide explanations for their calculations or reported that they were guesses. In tables 5, 6, 8, 9, and 10 in this appendix, we have identified the states that fall into each category. Overall, given the limitations in the information reported from some states, data reported by states and presented in this appendix should not be used to compare state programs.

Table 4: Selected State-Reported Underground Storage Tank Performance Measures, as of September 30, 2005

State	Active tanks	Closed tanks	Confirmed releases	Cleanups initiated	Cleanups completed	Cleanup backlog
Alabama	18,021	28,631	10,884	10,755	9,317	1,567
Alaska	1,065	6,269	2,278	2,206	1,545	733
Arizona	8,194	20,064	8,191	5,682	5,942	2,249
Arkansas	9,749	19,909	1,294	988	948	346
California	38,753	121,352	44,190	44,190	29,572	14,618
Colorado	8,165	20,770	6,541	6,373	5,602	939
Connecticut	11,871	19,868	2,465	2,415	1,596	869
Delaware	1,598	6,423	2,284	2,228	2,010	274
District of Columbia	732	3,050	815	815	572	243
Florida	31,109	94,240	23,990	14,618	8,761	15,229
Georgia	30,320	44,369	11,023	10,654	8,373	2,650
Hawaii	1,783	5,013	1,840	1,741	1,504	336
Idaho	3,498	9,541	1,345	1,314	1,184	161
Illinois	23,062	62,074	22,410	21,211	14,540	7,870
Indiana	14,049	35,332	8,275	7,457	4,994	3,281
Iowa	7,716	22,092	5,791	5,529	3,948	1,843
Kansas	7,236	19,529	4,616	4,379	2,632	1,984
Kentucky	13,098	35,212	13,151	13,100	10,696	2,455
Louisiana	13,953	31,128	2,719	2,719	1,674	1,045
Maine	3,359	12,222	2,215	2,156	2,075	140
Maryland	9,439	27,647	10,201	9,944	9,282	919
Massachusetts	11,368	22,141	6,103	5,890	5,026	1,077
Michigan	20,730	65,137	20,822	20,314	11,740	9,082
Minnesota	14,328	28,051	9,555	9,064	8,490	1,065
Mississippi	8,713	21,758	6,540	6,355	6,224	316
Missouri	10,305	28,432	6,184	5,803	4,798	1,386
Montana	3,311	12,158	2,898	2,123	1,785	1,113
Nebraska	6,999	14,084	5,951	4,089	3,776	2,175
Nevada	3,688	6,715	2,416	2,408	2,166	250
New Hampshire	2,935	10,856	2,218	2,218	1,389	829
New Jersey	17,931	54,794	9,669	8,812	5,734	3,935
New Mexico	4,098	12,232	2,471	1,786	1,633	838
New York	29,925	81,216	20,442	20,022	18,442	2,000
North Carolina	30,271	63,104	23,520	22,438	16,942	6,578

(Continued From Previous Page)

State	Active tanks	Closed tanks	Confirmed releases	Cleanups initiated	Cleanups completed	Cleanup backlog
North Dakota	2,185	6,941	812	803	779	33
Ohio	24,025	42,427	23,559	23,028	20,300	3,259
Oklahoma	11,582	24,265	4,036	4,036	3,537	499
Oregon	6,375	25,123	6,861	6,613	5,472	1,389
Pennsylvania	25,545	59,824	13,861	13,440	9,798	4,063
Rhode Island	1,691	7,111	1,238	1,238	978	260
South Carolina	12,137	31,521	8,698	8,239	5,325	3,373
South Dakota	2,980	6,761	2,347	2,344	2,147	200
Tennessee	16,147	32,429	12,842	12,914	11,892	950
Texas	57,219	109,535	24,301	21,689	20,120	4,181
Utah	4,051	12,635	4,120	4,032	3,681	439
Vermont	3,011	5,196	1,930	1,918	1,136	794
Virginia	25,464	52,174	10,474	10,204	9,662	812
Washington	10,397	34,959	6,142	5,779	4,115	2,027
West Virginia	6,033	18,618	2,909	2,706	1,751	1,158
Wisconsin	13,721	64,759	18,353	17,650	15,033	3,320
Wyoming	2,055	7,771	1,989	1,490	924	1,065
Total	**645,990**	**1,607,462**	**449,779**	**419,919**	**331,562**	**118,217**

Source: EPA.

Note: For definitions of performance measures in this table see table 1 of this report.

Table 5: State-Reported Estimates of the Number of Releases in the State's Cleanup Backlog That Will Be Cleaned Up Using Funding from Responsible Parties and from Public Sources, as of September 30, 2005

State	Estimated number of releases to be cleaned up with funding from each source	
	Responsible party only	At least some public funding
The following states generally (1) reported having fairly recent data quality reviews (2) reported having several internal controls on the, data, (3) reported having no significant data quality problems, and (4) provided fairly precise and mathematically grounded explanations for their calculations.		
Alabama	166	1,448
Colorado	310	629
Florida	2,604	12,625
Georgia	877	1,778
Illinois	1,968	5,903
Indiana	1,642	1,642
Kansas	6	1,978
Missouri	364	1,022
Montana	78	1,035
Nevada	[a]	254[b]
New Jersey	3,517	420
Pennsylvania	2,334	1,744
South Carolina	120	3,258
Texas	1,769	2,192
Utah	175	314
Virginia	609	203
Wyoming	0	1,065
The following states generally (1) reported having some internal controls on the data, and/or (2) reported some data quality problems, and/or (3) provided a mix of "guesses" and fairly precise explanations of their calculations.		
Arizona	268	1,500
Arkansas	17	329
Connecticut	10	859
Delaware	192	73
District of Columbia	245	0
Hawaii	336	0
Idaho	100	60
Iowa	514	1,324
Kentucky	246	2,209
Louisiana	0	1,254
Maine	17	80
Maryland	0	927

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State	Estimated number of releases to be cleaned up with funding from each source	
	Responsible party only	At least some public funding
Massachusetts	476	601
Minnesota	0	1,090
Mississippi	68	250
New Hampshire	[a]	[a]
New Mexico	48	790
New York	1,625	375
North Carolina	4,604	1,974
North Dakota	1	32
Ohio	2,362	1,282
Oregon	1,370	21
Rhode Island	67	200
Tennessee	354	655
Vermont	278	516
Washington	1,630	0
Wisconsin	1,097	2,300
These states generally (1) reported having few, if any internal controls on the data, and/or (2) reported having significant data quality problems, and/or (3) didn't provide explanations for their calculations or reported that they were guesses.		
Alaska	708	25
California	[c]	[c]
Michigan	4,800	4,200
Nebraska	652	1,523
Oklahoma	5	494
West Virginia	1,042	116
This state did not respond to the survey		
South Dakota		

Source: Responses to GAO's survey of tank program and/or state fund managers.

[a]State officials did not respond.

[b]For this question, Nevada officials provided us with the combined number of underground storage tanks, aboveground storage tanks, and heating oil tanks that will be cleaned up using funding from the state's financial assurance fund.

[c]Number of releases to be cleaned up with (1) funding from responsible parties only and (2) at least some public funding is unknown.

Table 6: State-Reported Numbers of Releases in the State's Cleanup Backlog from Tanks without a Viable Owner, as of September 30, 2005

State	Number of releases
The following states generally (1) reported having fairly recent data quality reviews, (2) reported having several internal controls on the data, (3) reported having no significant data quality problems, and (4) provided fairly precise and mathematically grounded explanations for their calculations.	
Alabama	363
Colorado	188[a]
Florida	[b]
Georgia	448
Illinois	[b]
Indiana	500[a]
Kansas	100[a]
Missouri	212[a]
Montana	31[a]
Nevada	[b]
New Jersey	[b]
Pennsylvania	2,334[a]
South Carolina	33
Texas	200[a]
Utah	57
Virginia	86[a]
Wyoming	[b]
The following states generally (1) reported having some internal controls on the data, and/or (2) reported some data quality problems, and/or (3) provided a mix of "guesses" and fairly precise explanations of their calculations.	
Arizona	100[a]
Arkansas	34[a]
Connecticut	100[a]
Delaware	32[a]
District of Columbia	0
Hawaii	0
Idaho	31[a]
Iowa	[b]
Kentucky	0
Louisiana	24[a]
Maine	0
Maryland	30[a]

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State	Number of releases
Massachusetts	50[a]
Minnesota	43[a]
Mississippi	36
New Hampshire	[c]
New Mexico	100[a]
New York	336[a]
North Carolina	994
North Dakota	11
Ohio	600[a]
Oregon	33[a]
Rhode Island	[b]
Tennessee	93
Vermont	90[a]
Washington	[b]
Wisconsin	[b]
These states generally (1) reported having few, if any internal controls on the data, and/or (2) reported having significant data quality problems, and/or (3) didn't provide explanations for their calculations or reported that they were guesses.	
Alaska	[b]
California	50[a]
Michigan	4,200[a]
Nebraska	699[a]
Oklahoma	61
West Virginia	[b]
This state did not respond to the survey	
South Dakota	

Source: Responses to GAO's survey of tank program and/or state fund managers

[a]Estimated numbers of releases.

[b]Number of releases unknown.

[c]New Hampshire officials did not respond to this survey question.

Table 7: State-Reported Frequency of Checking Financial Responsibility Coverage

State	At least annually	Every 1 to 2 years	Every 3 years or longer	Do not check	Other
Alabama					X
Alaska	X				
Arizona	X				
Arkansas			X		
California	X				
Colorado					X
Connecticut[a]				X	
Delaware			X		
District of Columbia			X		
Florida		X			
Georgia			X		
Hawaii		X			
Idaho			X		
Illinois					X
Indiana				X	
Iowa	X				
Kansas	X				
Kentucky			X		
Louisiana			X		
Maine[a]				X	
Maryland			X		
Massachusetts			X		
Michigan	X				
Minnesota[a]				X	
Mississippi					X
Missouri	X				
Montana			X		
Nebraska[a]				X	
Nevada	X				
New Hampshire					X
New Jersey			X		
New Mexico		X			
New York				X	
North Carolina					X

(Continued From Previous Page)

State	At least annually	Every 1 to 2 years	Every 3 years or longer	Do not check	Other
North Dakota					X
Ohio			X		
Oklahoma				X	
Oregon			X		
Pennsylvania	X				
Rhode Island					X
South Carolina	X				
South Dakota[b]					
Tennessee					X
Texas	X				
Utah	X				
Vermont	X				
Virginia			X		
Washington	X				
West Virginia			X		
Wisconsin	X				
Wyoming	X				

Source: Responses to GAO's survey of tank program and/or state fund managers.

Note: The "other" category includes responses such as "as events warrant," and "annual permit applications contain financial responsibility information that may be checked," among other responses.

[a]Connecticut, Maine, Minnesota, and Nebraska, which reported they do not check whether financial responsibility coverage is current, also reported that their financial assurance funds provide such coverage for all tanks in the state.

[b]South Dakota officials did not respond to the survey.

Table 8: State-Reported Expenditures of Public Funding to Clean Up Underground Storage Tank Sites by Source, 2005

Dollars in thousands

	Reported source of funding for expenditures			
State	Federal LUST Trust Fund	Other federal sources[a]	State financial assurance fund	Other state sources[b]
The following states generally (1) reported having fairly recent data quality reviews, (2) reported having several internal controls on the data, (3) reported having no significant data quality problems, and (4) provided fairly precise and mathematically grounded explanations for their calculations.				
Alabama	$0	$0	$27,566	$0
Colorado	226	81	23,979	0
Florida	0	0	148,110	0
Georgia	599	0	23,809	0
Illinois	0	0	52,193[c]	0
Indiana	835	0	45,000[c]	1,050[c]
Kansas	284	0	13,287	0
Missouri	837	[d]	11,270	[e]
Montana[f]	186[f]	0[f]	3,820[c,f]	[e,f]
Nevada	10[c]	0	6,760[c]	0
New Jersey	212[c]	0	1,227	3,433
Pennsylvania	0	0	71,725[c]	0[c]
South Carolina	594	28	18,505	2
Texas	1,100[c]	0	54,039[c]	5,530[c]
Utah	9	0	5,403	396
Virginia	515	0	16,957[c]	0
Wyoming	77	0	7,517	0
The following states generally (1) reported having some internal controls on the data, and/or (2) reported some data quality problems, and/or (3) provided a mix of "guesses" and fairly precise explanations of their calculations.				
Arizona	883	0	11,389	1,390[c]
Arkansas[f]	220[f]	0[f]	4,069[f]	0[f]
Connecticut	400[c]	0	6,969	0
Delaware	30[c]	[d]	[g]	1,050[c,e]
District of Columbia	0	0	[g]	0
Hawaii	0	0	[g]	0
Idaho	0	[d]	2,000[c]	0
Iowa	0	0	0	15,036
Kentucky	3	0	21,500	[e]
Louisiana	0	0	18,436	0
Maine[h]	0	0	1,151	0

(Continued From Previous Page)

Dollars in thousands

State	Reported source of funding for expenditures: Federal LUST Trust Fund	Other federal sources[a]	State financial assurance fund	Other state sources[b]
Maryland	445[c]	0	[g]	327[c]
Massachusetts	200[c]	[d]	30,989	250[c,e]
Minnesota[f]	914[f]	0[f]	15,000[c, f]	0[e,f]
Mississippi	441[c]	0	8,382[c]	0
New Hampshire	451	0	13,345	302
New Mexico	0	0	13,621	0
New York[i]				
North Carolina	1,196	0	46,966	279
North Dakota	91	0	498	0
Ohio	0	[d]	8,818	0
Oregon	4	4	[g]	418
Rhode Island	548	0	2,251	0
Tennessee	690	0	31,045	0
Vermont	0	0	3,105	0
Washington	165	0	[g]	0[c]
Wisconsin	0	0	28,000	0
These states generally (1) reported having few, if any internal controls on the data, and/or (2) reported having significant data quality problems, and/or (3) didn't provide explanations for their calculations or reported that they were guesses.				
Alaska	307[c]	0	[g]	0
California[f]	0[f]	0[f]	207,505[f]	800[f]
Michigan	0[c]	0	0	13,296[c]
Nebraska[f]	811[c,f]	0[f]	10,610[c,f]	0[f]
Oklahoma	765	0	15,047	100
West Virginia	173[c]	0	[g]	130[c]
This state did not respond to the survey				
South Dakota				

Source: Responses to GAO's survey of tank program and/or state fund managers.

Note: Our survey asked states to base their responses on federal fiscal year 2005 (Oct. 1, 2004 to Sept. 30, 2005) if possible; some states, however, reported responses as of other time frames, such as July 1, 2004 to June 30, 2005.

[a]The other federal sources category includes sources such as Brownfields grants.

[b]The other state sources category includes sources such as funds dedicated to tanks without a viable owner and other state funds.

[c]Estimated amount.

[d]Amount unknown.

[e]Officials indicated they did not know one or more aspects of the "other state sources" category.

[f]Officials in Arkansas, California, Minnesota, Montana, and Nebraska indicated that the amounts they reported included expenditures on sites in addition to federally-regulated underground storage tanks.

[g]Alaska, Delaware, the District of Columbia, Hawaii, Maryland, Oregon, Washington, and West Virginia never had state financial assurance funds.

[h]Maine officials based their response to this question on calendar year 2004.

[i]New York officials did not respond to these survey questions.

Table 9: State-Reported Balance of State Financial Assurance Funds, as of September 30, 2005

Dollars in thousands	
State	**Amount**
The following states generally (1) reported having fairly recent data quality reviews, (2) reported having several internal controls on the data, (3) reported having no significant data quality problems, and (4) provided fairly precise and mathematically grounded explanations for their calculations.	
Alabama	$7,719
Colorado	2,931
Florida	186,380
Georgia	63,939
Illinois	5,200[a]
Indiana	9,714
Kansas	2,226
Missouri	71,623
Montana	1,760
Nevada	11,300
New Jersey	95,142
Pennsylvania	206,800
South Carolina	21,712
Texas	168,000[a]
Utah	8,818
Virginia	943
Wyoming	17,688
The following states generally (1) reported having some internal controls on the data, and/or (2) reported some data quality problems, and/or (3) provided a mix of "guesses" and fairly precise explanations of their calculations.	
Arizona	40,000[a]
Arkansas	13,563
Connecticut	5,200[a]
Delaware	[b]
District of Columbia	[b]
Hawaii	[b]
Idaho	34,688
Iowa	[c]
Kentucky	54,700
Louisiana	19,186
Maine	5,573

(Continued From Previous Page)

Dollars in thousands

State	Amount
Maryland	[b]
Massachusetts	13,651
Minnesota	22,000[a]
Mississippi	4,458
New Hampshire	4,035
New Mexico	19,044
New York	[d]
North Carolina	2,834
North Dakota	8,378
Ohio	27,337
Oregon	[b]
Rhode Island	2,100[a]
Tennessee	10,085
Vermont	5,828
Washington	[b]
Wisconsin	35,798
These states generally (1) reported having few, if any internal controls on the data; and/or (2) reported having significant data quality problems; and/or (3) didn't provide explanations for their calculations or reported that they were guesses.	
Alaska	[b]
California	92,425
Michigan	[e]
Nebraska	16,169
Oklahoma	13,556
West Virginia	[b]
This state did not respond to the survey	
South Dakota	

Source: Responses to GAO's survey of tank program and/or state fund managers.

[a]Estimated amount.

[b]Alaska, Delaware, the District of Columbia, Hawaii, Maryland, Oregon, Washington, and West Virginia never had state financial assurance funds.

[c]Iowa used to operate an insurance-type fund that provided financial responsibility coverage, but the fund has been privatized.

[d]New York officials did not respond to this survey question.

[e]Michigan's state financial assurance fund is no longer active.

Table 10: State-Reported Revenues to State Financial Assurance Funds, 2005

Dollars in thousands

State	Tank fees	State gasoline taxes	Interest	Other[a]
The following states generally (1) reported having fairly recent data quality reviews, (2) reported having several internal controls on the data, (3) reported having no significant data quality problems, and (4) provided fairly precise and mathematically grounded explanations for their calculations.				
Alabama	$0	$35,022	$167	$0
Colorado	527	26,451	121	15
Florida	1,200	211,900	4,900	3,284[b]
Georgia	0	22,096	0	0
Illinois	0	72,284	0	0
Indiana	616[c]	28,875[c]	225	0
Kansas	0	10,920	125	0
Missouri	1,297	23,665	1,138	87
Montana	0	6,700[c]	35[c]	10[c]
Nevada	450	0	130[c]	0
New Jersey	0	0	2,284	24,787
Pennsylvania	7,100	53,800	192	13,136
South Carolina	1,203	17,500	799	111
Texas	0	72,000[c]	0	0
Utah	437	5,682	184	0
Virginia	0	37,897	37	67
Wyoming	490	11,593	0	0
The following states generally (1) reported having some internal controls on the data, and/or (2) reported some data quality problems, and/or (3) provided a mix of "guesses" and fairly precise explanations of their calculations.				
Arizona	0	29,431[c]	390[c]	30[c]
Arkansas	0	4,906	189	0
Connecticut	0	12,000	0	0
Delaware	[d]	[d]	[d]	[d]
District of Columbia	[d]	[d]	[d]	[d]
Hawaii	[d]	[d]	[d]	[d]
Idaho	99[c]	0	1,541	1
Iowa	[e]	[e]	[e]	[e]
Kentucky	0	45,100	277	47
Louisiana	25[c]	21,359	0	41
Maine[f]	126[c]	14,234[c]	74[c]	443[c]

(Continued From Previous Page)

Dollars in thousands

State	Tank fees	State gasoline taxes	Interest	Other[a]
Maryland	[d]	[d]	[d]	[d]
Massachusetts	2,382[c]	76,813	[g]	[b]
Minnesota	0	26,000[c]	1,000[c]	115[c]
Mississippi	0	9,977[c]	173[c]	0
New Hampshire	0	11,366	90	0
New Mexico	0	18,191	0	0
New York[h]				
North Carolina	7,987	41,942	50	197
North Dakota	290	0	63[c]	0
Ohio	13,568	0	380	0
Oregon	[d]	[d]	[d]	[d]
Rhode Island	0	4,200[c]	[g]	0[c,i]
Tennessee	3,060	17,785	258	5,475
Vermont	365	5,243	125	288
Washington	[d]	[d]	[d]	[d]
Wisconsin	0	68,000	0	0
These states generally (1) reported having few, if any internal controls on the data, and/or (2) reported having significant data quality problems, and/or (3) didn't provide explanations for their calculations or reported that they were guesses.				
Alaska	[d]	[d]	[d]	[d]
California	0	218,195	1,611	2,935
Michigan[j]				
Nebraska	534	10,413	696	70
Oklahoma	0	21,324	307	218
West Virginia	[d]	[d]	[d]	[d]
This state did not respond to the survey				
South Dakota				

Source: Responses to GAO's survey of tank program and/or state fund managers.

Note: Our survey asked states to base their responses on federal fiscal year 2005 (Oct. 1, 2004 to Sept. 30, 2005) if possible; some states, however, reported responses as of other time frames, such as July 1, 2004 to June 30, 2005.

[a]Other category includes: cost recovery, other state sources such as fines, and other sources such as loan repayments. Revenues from federal sources are not included.

[b]Officials indicated they did not know one or more aspects of the "other" category.

[c]Estimated amounts.

[d]Alaska, Delaware, the District of Columbia, Hawaii, Maryland, Oregon, Washington, and West Virginia never had state financial assurance funds.

[e]Iowa used to operate an insurance-type fund that provided financial responsibility coverage, but the fund has been privatized.

[f]Maine officials based their response to this question on calendar year 2004.

[g]Amount of interest revenues unknown.

[h]New York officials did not respond to this survey question.

[i]Rhode Island officials estimated their state fund collected $300 from other sources in 2005.

[j]Michigan's state financial assurance fund is no longer active.

Table 11: State-Reported Diversions from State Financial Assurance Funds for Purposes Other Than Those Related to the Underground Storage Tank Program, 2001–2005

Dollars in thousands

State	2001	2002	2003	2004	2005
Alabama	$0	$0	$0	$0	$0
Alaska[a]					
Arizona	0	0	0	0	0
Arkansas	0	0	0	0	46
California	0	0	0	0	0
Colorado	0	4,000	0	0	0
Delaware[a]					
District of Columbia[a]					
Florida	12,000[b]	20,000[b]	0	0	0
Georgia	0	0	0	0	0
Hawaii[a]					
Idaho	0	0	0	0	0
Illinois	0	12,029[b]	12,100	500	0
Indiana	0	5,000	4,500	0	0
Iowa[c]					
Kansas	0	10,000	0	0	0
Kentucky	8,000	58,400	74,100	27,100	291
Louisiana	0	0	0	0	0
Maine	0	0	0	0	142
Maryland[a]					
Michigan[d]					
Mississippi	0	0	833	1,529	3,100
Missouri	0	0	0	0	0
Montana	0	0	0	0	0
Nebraska	0	10,250	300	3,000	1,800
Nevada	900[b]	900[b]	900[b]	900[b]	1,100
New Hampshire	0	0	0	0	0
New Jersey	0	0	0	45,812	0
New Mexico	1,900[b]	1,500[b]	900[b]	2,600[b]	5,400[b]
North Carolina	0	0	0	0	0
North Dakota	0	0	0	0	0
Ohio	0	0	0	0	0

(Continued From Previous Page)

Dollars in thousands

State	2001	2002	2003	2004	2005
Oklahoma	0	0	0	0	0
Oregon[a]					
Pennsylvania[e]	0	100,000[e]	0	0	0
Rhode Island	0	0	0	0	0
South Carolina	0	0	1,096	76	0
South Dakota[f]					
Tennessee	0	0	0	0	0
Texas	0	0	0	0	0
Utah	0	0	0	0	0
Vermont[g]	0	1,776[g]	0	0	0
Virginia	0	0	0	0	0
Washington[a]					
West Virginia[a]					
Wisconsin	0	0	0	0	0
Wyoming	0	0	0	0	0

Source: Responses to GAO's survey of tank program and/or state fund managers.

[a]Alaska, Delaware, the District of Columbia, Hawaii, Maryland, Oregon, Washington, and West Virginia never had state financial assurance funds.

[b]Estimated amount.

[c]Iowa used to operate an insurance-type fund that provided financial responsibility coverage, but the fund has been privatized.

[d]Michigan's state financial assurance fund is no longer active.

[e]Pennsylvania officials reported that $17,500,000 of the diverted funds had been reimbursed to the state fund as of September 30, 2005.

[f]South Dakota officials did not respond to the survey.

[g]Vermont officials reported that $530,000 of the diverted funds had been reimbursed to the state fund as of September 30, 2005.

GAO Survey of the 50 States and the District of Columbia

United States Government Accountability Office

GAO SURVEY OF THE 50 STATES: FINANCING CLEANUPS OF LEAKING UNDERGROUND STORAGE TANKS

Introduction

The U.S. Government Accountability Office (GAO) is an agency of the legislative branch that reviews federal programs on behalf of the U.S. Congress. To aid in our continuing reviews of the Environmental Protection Agency's (EPA) Underground Storage Tank program, we are currently surveying the 50 states as part of a study of how states finance the cleanup of leaking underground storage tank (LUST) sites. We will use the information gathered in this survey to provide the Congress with information about the magnitude of LUST cleanup costs across all 50 states and the resources available to state programs to address these cleanups.

We are aware of similar survey efforts conducted in the past year by the Vermont Department of Environmental Conservation and by EPA's Office of Underground Storage Tanks. We have discussed our survey with these parties and eliminated overlap where feasible.

Your prompt response to this survey is very important. Without your state's response, we will not be able to accurately report to the Congress on the magnitude of LUST cleanup costs across all 50 states, how states are financing these cleanups, and the resources the states have to fund these cleanups. Your prompt participation will help us avoid costly follow-ups.

To answer some of our questions, you may need to coordinate your responses with other state agencies responsible for certain aspects of the program.

Instructions

This questionnaire can be filled out using MS-Word and returned via e-mail to USTSurvey@gao.gov. If you prefer, you may print copies of the questionnaire and complete them by hand. If you choose to print the questionnaire, please mail or fax it to:

Nico Sloss, Senior Analyst
U.S. Government Accountability Office
10 Causeway Street, Suite 575
Boston, MA 02222

Fax: (617) 788-0505

Please use your mouse to navigate by clicking on the field or check box ☐ you wish to answer.

- To select a check box or button, simply click on the center of the box.

- To change or deselect a check box response, simply click on the check box and the 'X' will disappear.
- To answer a question that requires that you write a comment, click on the answer box ____ and begin typing. The box will expand to accommodate your answer.

Definitions

To help ensure consistency in survey responses from the various states, we provide definitions for terms in this survey at or near the point at which the term appears. Please consider these definitions when responding to survey questions.

If you have any questions about the contents of this questionnaire, please contact

Nico Sloss		Gerald Laudermilk
Phone: (617) 788-0516	OR	Phone: (617) 788-0543
e-mail: SlossN@gao.gov.		e-mail: LaudermilkG@gao.gov .

Thank you in advance for your cooperation.

Database Information

1. **We are interested in information about your state's database(s) for underground storage tank (UST) program management, including data on the number of tanks and releases in your state, as well as financial information about your state's program.** *[Please describe one database in each row. Provide documentation for reviews of databases via e-mail attachment, fax or mail to the addresses listed above.]*

What is the name of your state's database(s) for UST management?	Have there been any reviews of the quality of the data?	What year was the most recent review? *[Enter 4 digit year.]*
a. ____ →	Yes..... ☐ No..... ☐	____
b. ____ →	Yes..... ☐ No..... ☐	____
c. ____ →	Yes..... ☐ No..... ☐	____
d. ____ →	Yes..... ☐ No..... ☐	____

2. **Which of the following types of information does each of the databases you listed above contain?** *[For each database, check all that apply]*

Database	Tank data (e.g. location) ▼	Release data ▼	Expenditure/ financial data ▼	Financial responsibility data ▼
a.____	☐	☐	☐	☐
b.____	☐	☐	☐	☐
c.____	☐	☐	☐	☐
d.____	☐	☐	☐	☐

3. What procedures are used to ensure all data contained in the databases you listed above are accurately recorded? *[For each database, check all that apply.]*

Database	Systematic monitoring or spot checks of entered data ▼	Verification to source documents ▼	Automated edit checks/ data entry controls ▼	Error correction procedures ▼	No procedures in place ▼
a.__.....	☐	☐	☐	☐	☐
b.__.....	☐	☐	☐	☐	☐
c.__.....	☐	☐	☐	☐	☐
d.__.....	☐	☐	☐	☐	☐

4. What are the known limitations of the current data (e.g., data elements that are known to be incomplete, incorrect, or out-of-date) for each of the databases you listed above?

Database	Description of Limitations
a.... ___	None ☐
b. .. ___	None ☐
c. ___	None ☐
d. ___	None ☐

5. Is there any additional information about the way your states' data for UST management is collected, entered, stored, and quality reviewed that would help inform our interpretation of these data?

Scope of the Problem

Federally regulated USTs: In this survey we are concerned with federally regulated USTs, as defined by EPA. These tanks include "any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. This term does not include any: (a) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes; (b) tank used for storing heating oil for consumptive use on the premises where stored; (c) septic tank; (d) certain pipeline facilities; (e) surface impoundment, pit, pond, or lagoon; (f) storm-water or wastewater collection system; (g) flow-through process tank; (h) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or (i) storage tank situated in an underground area if the storage tank is situated upon or above the surface of the floor."

6. What are the cumulative data for the number of federally regulated USTs for your state, first as of September 30, 2004, and then as of September 30, 2005? Are these numbers exact or estimated?

	Cumulative data, as of September 30, **2004**			Cumulative data, as of September 30, **2005**		
		Is this an exact number or an estimate?			Is this an exact number or an estimate?	
	Number ▼	Exact ▼	Estimate ▼	Number ▼	Exact ▼	Estimate ▼
a. Active tanks	____	☐	☐	____	☐	☐
b. Closed tanks.....	____	☐	☐	____	☐	☐
c. Confirmed releases.....	____	☐	☐	____	☐	☐
d. Cleanups initiated.....	____	☐	☐	____	☐	☐
e. Cleanups completed.....	____	☐	☐	____	☐	☐
f. Emergency responses...	____	☐	☐	____	☐	☐

7. How many new releases from federally regulated USTs did your state confirm in each of the last five federal fiscal years?

	New releases: None ▼	New releases: Number ▼	Is this an exact number or an estimate? Exact ▼	Is this an exact number or an estimate? Estimate ▼	Don't know ▼
a. 2001	☐	_____	☐	☐	☐
b. 2002	☐	_____	☐	☐	☐
c. 2003	☐	_____	☐	☐	☐
d. 2004	☐	_____	☐	☐	☐
e. 2005	☐	_____	☐	☐	☐

f. How did you calculate the number of new releases from USTs your state confirmed in each of the last five years?

8. How many new releases from federally regulated USTs do you estimate that your state will confirm over the next five years?

_____Estimated number of new releases your state will confirm over the next five years

a. How did you estimate the number of new releases from federally regulated USTs that your state will confirm over the next five years?

b. How many of these new releases over the next five years do you estimate will require at least some amount of public funding to clean up?

_____Estimated number of new releases over the next five years that will require at least some amount of public funding to clean up

c. How did you estimate the number of new releases over the next five years that will require at least some amount of public funding to clean up?

9. EPA computes your state's "cleanup backlog" by subtracting the cumulative number of cleanups completed from the cumulative number of confirmed releases. Based on the numbers you provided above, your state's cleanup backlog, as of September 30, 2005 is: 0. Is this number correct?

Yes ..... ☐
No..... ☐

a. What is the correct number?

_____ releases in the backlog

Please refer to this number when answering questions about your state's cleanup backlog in completing the remainder of this survey.

10. Considering the number of releases in your state's cleanup backlog as of September 30, 2005, how many involve MtBE at levels requiring cleanup?

	None	Number	Is this an exact number or an estimate? Exact	Estimate	Don't know
	▼	▼	▼	▼	▼
Number of releases with MtBE	☐	_____	☐	☐	☐

a. How did you calculate the number of releases in your state's cleanup backlog that involve the release of MtBE at levels requiring cleanup?

11. Considering the number of releases in your state's cleanup backlog as of September 30, 2005, how many have affected groundwater at levels requiring cleanup?

	None ▼	Number ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Number of releases affecting groundwater	☐	____	☐	☐	☐

a. How did you calculate the number of releases in your state's cleanup backlog that have affected groundwater at levels requiring cleanup?

12. Is there any additional information about your state's data for UST management that would help inform our interpretation of your responses to questions about the scope and type of UST cleanups in your state?

Sources of Funding for Cleanup

Definitions:
Public funding: Includes any funding controlled and/or provided by state and federal agencies—for example, funds from the federal LUST Trust Fund, state financial assurance funds, other state funds that have not been approved by EPA to serve as financial responsibility mechanisms, or funds appropriated by the state to pay for cleanup that would not otherwise occur. Do not include funds spent by federal, state, and local governmental agencies to clean up releases from tanks they either own or operate—these funds would be considered to be provided by the responsible party.

State financial assurance fund: Any state fund used to pay for cleanups of releases from federally regulated USTs. We do not make a distinction between funds that EPA has approved as a financial responsibility mechanism and those that EPA has not approved. We recognize that in some cases a state's fund may cover tanks without a viable responsible party as well as other types of tanks. In those cases where a state fund is dedicated solely to coverage of tanks without a viable responsible party, the survey provides a separate space to answer questions about such a fund.

Responsible party funding: Includes both direct expenditures by responsible parties (for example, a tank owner paying out-of-pocket for all or a portion of the costs of cleanup) and indirect expenditures (for example, a tank owner's insurance company paying for all or a portion of the costs of cleanup). *Note*: In this survey, we request the known or estimated number of cleanups funded by responsible parties, **not** specific cost data.

EPA-defined site cleanup costs: "All costs associated with site response concerning prevention or mitigation of threats to public health, welfare, or the environment that may occur by a release (or suspected release) of petroleum from an underground storage tank. These costs include emergency responses, site investigations, exposure assessments, the planning and design of corrective action, and the conduct, management and oversight of long-term remedial corrective actions."

13. Considering the number of releases in your state's cleanup backlog as of September 30, 2005, what is your estimate of the number of these releases for which EPA-defined site cleanup costs will be paid for exclusively by responsible parties and the number of these releases for which some amount of public funding will be required? *[Please provide your best estimate.]*

a. _____ number of releases for which cleanup costs will be paid exclusively by a responsible party

b. _____ number of releases for which cleanup costs will be paid with some amount of public funding

0 Total

c. How did you estimate the number of releases for which EPA-defined site cleanup costs will be paid for exclusively by responsible parties and the number of these releases for which some amount of public funding will be required?

14. Among those releases in the current cleanup backlog that will require at least some amount of public funding after September 30, 2005, excluding funds already spent on these cleanups, how many would you estimate will require public funding amounts in the following ranges?

	Estimated amount of public funding per release	Number of releases ▼
a.	$0 - $99,999	_____
b.	$100,000-$499,999	_____
c.	$500,000-$999,999	_____
d.	$1,000,000 or more	_____
e.	Number for which costs cannot be estimated	_____

f. How did you estimate the number of releases that fall into each category of funding?

15. Based on your experience with cleanups of leaking federally regulated USTs that require some amount of public funding, what do you estimate is the average cost in public funds to fully address each release?

$_____ Estimated average cost in public funds to fully address each release

a. What do you estimate is the average cost in public funds to fully address each release that involves MtBE at levels requiring cleanup?

$_____ Estimated cost in public funds to fully address each release that involves MtBE at levels requiring cleanup

b. What do you estimate is the average cost in public funds to fully address each release that impacts groundwater at levels requiring cleanup?

$_____ Estimated cost in public funds to fully address each release that impacts groundwater at levels requiring cleanup

c. How did you estimate these average costs in public funding?

16. In the past year, what was the total amount spent (in actual outlays) to pay for the public funding portion of cleanups at federally regulated UST sites? *[If possible, provide this amount for the latest federal fiscal year (10/1/04 to 9/30/05).]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Total outlays.....	☐	$_____	☐	☐	☐

a. Are these amounts for the latest federal fiscal year (10/1/04 to 9/30/05)?

Yes .....☐
No.....☐

b. On what date does the year for which you are reporting start?

_____ *[Enter mm/dd/yy.]* Start of reporting year

17. Of the total spent in the past year, how much funding was spent (in actual outlays) from each of the following sources to pay for the public funding portion of cleanups at federally regulated UST sites? *[If possible, provide these amounts for the latest federal fiscal year (10/1/04 to 9/30/05).]*

	Funds spent: None ▼	Funds spent: Amount ▼	Is this an exact number or an estimate? Exact ▼	Is this an exact number or an estimate? Estimate ▼	Don't know ▼
a. Federal LUST Trust Fund	☐	$____	☐	☐	☐
b. Other federal sources *[Please specify]* ____.....	☐	$____	☐	☐	☐
c. State financial assurance fund	☐	$____	☐	☐	☐
d. State fund dedicated to tanks without a viable owner	☐	$____	☐	☐	☐
e. Other state sources *[Please specify]* ____.....	☐	$____	☐	☐	☐
f. Other sources *[Please specify]* ____	☐	$____	☐	☐	☐

g. Are these amounts for the latest federal fiscal year (10/1/04 to 9/30/05)?

Yes .....☐

No.....☐

h. On what date does the year for which you are reporting start?

____ *[Enter mm/dd/yy.]* Start of reporting year

18. Is there any additional information about the amounts of public funding listed above that would help inform our interpretation of your responses to these questions?

19. What additional sources of public funding for LUST cleanups, if any, do you believe have a high probability of becoming available in the next 5 years?

a. What were the primary factors you considered in making an assessment of the probability that additional sources of public funding for LUST cleanups will become available in the next 5 years?

20. Among the current sources of public funding for LUST cleanups, which sources, if any, do you believe have a high probability of no longer being available in the next 5 years, and why not?

a. What were the primary factors you considered in making an assessment of the probability that any of the current sources of public funding for LUST cleanups will no longer be available in the next 5 years?

Tanks without a Viable Owner

0

For purposes of this survey, consider tanks among your state's cleanup backlog without a viable owner to be those tanks where, as of September 30, 2005, the responsible party was unknown, unwilling, or unable to perform the needed cleanup (for example, "orphaned" or abandoned tanks).

21. How many releases in your state's cleanup backlog, identified above, come from tanks without a viable owner?

	None ▼	Number ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Number of releases	☐	____	☐	☐	☐

a. How did you calculate the number of releases in your state's cleanup backlog that come from tanks without a viable owner?

22. For how many releases in your state's cleanup backlog has the state not yet determined whether a responsible party is known, willing, and able to perform the cleanup?

	None ▼	Number ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Number of releases	☐	____	☐	☐	☐

a. How did you calculate the number of releases in your state's cleanup backlog for which the state has not yet determined whether a responsible party is known, willing, and able to perform the cleanup?

23. In the past year, how much public funding from all sources was spent (in actual outlays) on cleaning up releases from USTs, both WITH and WITHOUT a viable owner? *[If possible, provide these amounts for the latest federal fiscal year, 10/1/04 to 9/30/05.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
a. Public funding spent to clean up tanks **WITH** a viable owner	☐	$____	☐	☐	☐
b. Public funding spent to clean up tanks **WITHOUT** a viable owner.....	☐	$____	☐	☐	☐
Total		$0			

c. Is this the total amount ($0) spent (in actual outlays) in the past year for the public funding portion of cleanups at federally regulated UST sites?

Yes .....☐
No.....☐

d. Why is this amount different?

e. Is this amount for the latest federal fiscal year (10/1/04 to 9/30/05)?

Yes .....☐
No.....☐

f. On what date does your reporting year begin?

____ *[Enter mm/dd/yy.]* Beginning date of reporting year

g. How did you calculate the amount of public funding spent to clean up releases from USTs with and without a viable owner?

24. Based on the backlog of releases from USTs without a viable owner as of September 30, 2005, identified above [___], how much do you estimate it will cost to complete the remainder of the cleanups for all of these releases? *[Enter amount in whole dollars.]*

$_____Estimated cost

None ..... ☐ ➔ ***Go to Q25.***

Don't know..... ☐ ➔ ***Go to Q25.***

a. How did you estimate the cost to complete the remainder of the cleanups for the backlog of releases from USTs without a viable owner?

State Cleanup Funds

For the purposes of the following questions, please consider two types of state cleanup funds:

(1) state financial assurance funds that cover the cleanup of contamination from federally regulated USTs, which may or may not include tanks without a viable owner, and

(2) funds that are devoted solely to the cleanup of contamination from tanks without a viable owner.

In this survey we ask about both types of funds as applicable to your state.

25. Has your state EVER had a state financial assurance fund, as defined in (1) above?

Yes ☐

No ☐ → ***Skip to Q37.***

26. What was the status of your state's financial assurance fund as of September 30, 2005? *[Check the option that describes the fund's actual status.]*

Not applicable, never had this type of fund ☐ → ***Skip to Q37.***

Fund is no longer active ☐ → ***Skip to Q37.***

Accepting and paying all valid claims without restriction ☐ → ***Go to Q27***

Accepting and paying claims with some restrictions ☐

a. Is your state fund limiting the number of claims it accepts based on the amount of funds it has available to pay for those claims?

Yes ☐
No ☐

b. Is your state fund setting priorities for paying claims to conserve funds?

Yes ☐
No ☐

c. Is your state's financial assurance fund ONLY accepting claims for releases that occurred before or after a certain date (e.g., an eligibility sunset date)?

No ☐
Yes ☐

d. What are the eligibility dates for releases? *[Fill in either or both dates as applicable.]*

Before _____ [*Enter mm/dd/yy.*]

After _____ [*Enter mm/dd/yy.*]

e. Are there other restrictions on accepting and paying claims?

27. Please describe the deductible amount(s) paid by responsible parties and any maximum amount the state financial assurance fund will pay for each release from a federally regulated UST.

28. How much was deposited into your state's financial assurance fund in the past year?
[Enter amount in whole dollars.]

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Amount deposited.....	☐	$____	☐	☐	☐

a. Is this amount for the latest federal fiscal year (10/1/04 to 9/30/05)?
Yes.....☐
No .....☐

b. On what date does your reporting year begin?

____ *[Enter mm/dd/yy.]* Beginning date of reporting year

29. How much of the amount deposited into your state's financial assurance fund in the past year was from each of the following sources? *[Enter amount in whole dollars.]*

	Funds deposited		Is this an exact number or an estimate?		Don't know
	None	Amount	Exact	Estimate	
a. Flat rate fees assessed on tanks..	☐	$____	☐	☐	☐
b. Fees/taxes assessed on a per-unit basis on fuel(s).....	☐	$____	☐	☐	☐
c. Interest	☐	$____	☐	☐	☐
d. Cost recovery.....	☐	$____	☐	☐	☐
e. Combined federal sources *[Please specify sources]* _____.	☐	$____	☐	☐	☐
f. Combined state sources *[Please specify sources]* _____.	☐	$____	☐	☐	☐
g. Combined other sources *[Please specify sources]* _____.	☐	$____	☐	☐	☐

30. What do you anticipate will happen to revenues to your state's financial assurance fund over the next 5 years, compared with the annual revenues accrued to the fund in the past year? *[Check one.]*

Large increase..... ☐

Moderate increase..... ☐

Stay about the same..... ☐

Moderate decrease..... ☐

Large decrease..... ☐

a. What were the primary factors you considered in making this assessment?

31. What was the overall balance of your state's financial assurance fund as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Balance	☐	$____	☐	☐	☐

a. Of this balance, how much had been *obligated* as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Obligated	☐	$____	☐	☐	☐

32. What was the amount of the *outstanding claims (claims received by the state program for which funds have not yet been obligated)* on your state's financial assurance fund as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Outstanding claims	☐	$____	☐	☐	☐

33. During the past 5 years, what amount of funding, if any, did your state divert from its financial assurance fund for purposes other than those related to the UST program? *[Enter amount in whole dollars.]*

	Funds diverted: None ▼	Funds diverted: Amount ▼	Is this an exact number or an estimate? Exact ▼	Is this an exact number or an estimate? Estimate ▼	Don't know ▼
a. 2001	☐	$____	☐	☐	☐
b. 2002	☐	$____	☐	☐	☐
c. 2003	☐	$____	☐	☐	☐
d. 2004	☐	$____	☐	☐	☐
e. 2005	☐	$____	☐	☐	☐
Total		$0			

f. How much, if any, of the total amount diverted over the past 5 years had been reimbursed to the state financial assurance fund as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Is this an exact number or an estimate? Estimate ▼	Don't know ▼
Reimbursed	☐	$____	☐	☐	☐

g. If applicable, for what purposes did your state divert UST financial assurance funds?

34. As of September 30, 2005, had your state decided to *stop accepting new claims* against the state financial assurance fund after a certain date?

____ *[Enter mm/dd/yy.]* Date after which claims will no longer be accepted

No decision made to stop accepting claims..... ☐

35. As of September 30, 2005, had your state decided to *stop collecting revenues* for the state financial assurance fund after a certain date?

_____ *[Enter mm/dd/yy.]* Date after which revenues will no longer be collected

No decision made to stop collecting claims ..... ☐

36. How capable is your state's financial assurance fund of *meeting future demands* upon it? *[Check one].*

Able to meet all..... ☐

Able to meet most..... ☐

Able to meet some ..... ☐

Not able to meet any..... ☐

a. What were the primary factors you considered in making this assessment?

State Fund Dedicated to Tanks without a Viable Owner

37. What was the status of your state's fund dedicated to tanks without a viable owner as of September 30, 2005? *[Check the option that describes the fund's actual status].*

Not applicable, never had this type of fund ☐ →***Skip to Q47.***

Fund is no longer active ☐ →***Skip to Q47.***

Accepting and paying all valid claims without restriction ☐ →***Go to Q38***

Accepting and paying claims with some restrictions ☐

a. Is your state fund limiting the number of claims it accepts based on the amount of funds it has available to pay for those claims?

Yes ☐
No ☐

b. Is your state fund setting priorities for paying claims to conserve funds?

Yes ☐
No ☐

c. Is your state's fund dedicated to tanks without a viable owner ONLY accepting claims for releases that occurred before or after a certain date (e.g., an eligibility sunset date)?

No ☐
Yes ☐

d. What are the eligibility dates for releases? *[Fill in either or both dates as applicable.]*

Before _____ [*Enter mm/dd/yy.]*

After _____ [*Enter mm/dd/yy.]*

e. Are there other restrictions on accepting and paying claims?

38. How much was deposited into your state's fund dedicated to tanks without a viable owner in the past year? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Amount deposited.....	☐	$____	☐	☐	☐

a. Is this amount for the latest federal fiscal year (10/1/04 to 9/30/05)?

Yes .....☐
No.....☐

b. On what date does your reporting year begin?

____ *[Enter mm/dd/yy.]* Beginning date of reporting year

39. Approximately how much of the amount deposited into your state's fund dedicated to tanks without a viable owner in the past year was from each of the following sources? *[Enter amount in whole dollars.]*

	Funds deposited None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
a. Flat rate fees assessed on tanks.....	☐	$____	☐	☐	☐
b. Fees/taxes assessed on a per-unit basis on fuel(s).....	☐	$____	☐	☐	☐
c. Interest	☐	$____	☐	☐	☐
d. Cost recovery.....	☐	$____	☐	☐	☐
e. Combined federal sources *[Please specify sources]* ____.....	☐	$____	☐	☐	☐
f. Combined state sources *[Please specify sources]* ____.....	☐	$____	☐	☐	☐
g. Combined other sources *[Please specify sources]* ____.....	☐	$____	☐	☐	☐

40. What do you anticipate will happen to revenues to your state's fund dedicated to tanks without a viable owner over the next 5 years, compared with the annual revenues accrued to the fund in the past year? *[Check one.]*

- Large increase..... ☐
- Moderate increase..... ☐
- Stay about the same..... ☐
- Moderate decrease..... ☐
- Large decrease..... ☐

a. What were the primary factors you considered in making this assessment?

41. What was the overall balance of your state's fund dedicated to tanks without a viable owner as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Balance	☐	$____	☐	☐	☐

a. Of this balance, how much had been *obligated* as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Obligated	☐	$____	☐	☐	☐

42. What was the amount of the *outstanding claims* (*claims received by the state program for which funds have not yet been obligated)* on your state's fund dedicated to tanks without a viable owner as of September 30, 2005? *[Enter amount in whole dollars.]*

None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
☐	$____	☐	☐	☐

43. During the past 5 years, what amount of funding, if any, did your state divert from its fund dedicated to tanks without a viable owner for purposes other than those related to the UST program? *[Enter amount in whole dollars.]* _____

	Funds diverted		Is this an exact number or an estimate?		
	None ▼	Amount ▼	Exact ▼	Estimate ▼	Don't know ▼
a. 2001	☐	$____	☐	☐	☐
b. 2002	☐	$____	☐	☐	☐
c. 2003	☐	$____	☐	☐	☐
d. 2004	☐	$____	☐	☐	☐
e. 2005	☐	$____	☐	☐	☐
Total		$0			

f. How much, if any, of the total amount diverted over the past 5 years had been reimbursed to the state fund dedicated to tanks without a viable owner as of September 30, 2005? *[Enter amount in whole dollars.]*

	None ▼	Amount ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Reimbursed	☐	$____	☐	☐	☐

g. If applicable, for what purposes did your state divert funds from the fund dedicated to tanks without a viable owner?

44. As of September 30, 2005, had your state decided to *stop accepting new claims* against the state fund dedicated to tanks without a viable owner after a certain date?

_____ *[Enter mm/dd/yy.]* Date after which claims will no longer be accepted

No decision made to stop accepting claims..... ☐

45. As of September 30, 2005, had your state decided to *stop collecting revenues* for the state fund dedicated to tanks without a viable owner after a certain date?

_____ *[Enter mm/dd/yy.]* Date after which revenues will no longer be collected

No decision made to stop collecting claims ..... ☐

46. How capable is your state's fund dedicated to tanks without a viable owner of *meeting future demands* upon it? *[Check one].*

Able to meet all..... ☐

Able to meet most..... ☐

Able to meet some ..... ☐

Not able to meet any..... ☐

a. What were the primary factors you considered in making this assessment?

47. If your state has never had a fund dedicated to tanks without a viable owner, or if this fund is no longer active, how does your state pay for the cleanup of releases from tanks without a viable owner?

Federal Funds

48. In the past year, how much money from LUST Trust Fund cooperative agreement funds did your state spend (in actual outlays) on administrative costs, enforcement costs, and site clean-up costs? *[If possible, provide these amounts for the latest federal fiscal year, 10/1/04 to 9/30/05.]*

	Funds spent: None	Funds spent: Amount	Is this an exact number or an estimate? Exact	Is this an exact number or an estimate? Estimate	Don't know
a. Administrative costs	☐	$____	☐	☐	☐
b. Enforcement costs	☐	$____	☐	☐	☐
c. Site cleanup costs	☐	$____	☐	☐	☐
d. Total costs		$0			

e. Are these amounts for the latest federal fiscal year (10/1/04 to 9/30/05)?

Yes ☐

No ☐

f. On what date does your reporting year begin?

____ *[Enter mm/dd/yy.]* Beginning date of reporting year

49. According to EPA, states may sometimes not spend a given year's entire LUST Trust Fund award in the year the funds are provided. As of September 30, 2005, what was the state's unobligated balance of federal LUST Trust Funds, if any?

	None	Amount	Is this an exact number or an estimate? Exact	Is this an exact number or an estimate? Estimate	Don't know
State's unobligated balance of federal LUST Trust Funds	☐	$____	☐	☐	☐

50. Is there any additional information about the LUST Trust Fund amounts listed above that would help inform our interpretation of your responses to these questions?

Questions about Financial Responsibility

51. How do responsible parties who have active federally regulated USTs in your state demonstrate financial responsibility? Please list *the number of tanks covered* by the various available financial responsibility mechanisms below.

	None ▼	Number ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
a. State financial assurance fund	☐	____	☐	☐	☐
b. Financial test of self-insurance	☐	____	☐	☐	☐
c. Corporate guarantee	☐	____	☐	☐	☐
d. Insurance coverage	☐	____	☐	☐	☐
e. Surety bond	☐	____	☐	☐	☐
f. Letter of credit	☐	____	☐	☐	☐
g. Trust fund set up by owner or operator	☐	____	☐	☐	☐
h. Bond rating test (local government only)	☐	____	☐	☐	☐
i. Financial test (local government only)	☐	____	☐	☐	☐
j. Guarantee from another local government or the state (local government only)	☐	____	☐	☐	☐
k. A dedicated fund (local government only)	☐	____	☐	☐	☐
l. Other state-authorized methods *[Please specify.]* ____	☐	____	☐	☐	☐

52. Is there any additional information about how you calculated the number of tanks covered by the various financial responsibility mechanisms that would help inform our interpretation of your responses?

53. Which of the following describe your state's procedures for determining whether a tank owner's financial responsibility is current? *[Check all that apply.]*

- **a.** Attempt to check financial responsibility on a regular basis (e.g. during regular inspections) ☐
- **b.** Target inspections (e.g. to USTs deemed likely to not be current on financial responsibility) ☐
- **c.** As events warrant (e.g. upon tank installation or upgrade, upon a release) ☐
- **d.** State does not check financial responsibility ☐
- **e.** Other *[Please specify.]* _____ ☐

54. How frequently, if at all, does your state check whether a tank owner's financial responsibility is current? *[Check one.]*

- At least annually ☐
- Every 1 to 2 years ☐
- Every 3 years or longer ☐
- State does not check financial responsibility ☐
- Other *[Please specify.]* _____ ☐

55. Over the past 5 years, how many cases has your state encountered in which tank owners did not have adequate financial responsibility?

	None ▼	Number ▼	Is this an exact number or an estimate? Exact ▼	Estimate ▼	Don't know ▼
Number of cases	☐	_____	☐	☐	☐

a. How did you calculate the number of cases that your state has encountered over the past 5 years in which tank owners did not have adequate financial responsibility?

56. Does your state ever impose penalties on responsible parties for multiple releases from federally regulated USTs?

Yes .....☐

No.....☐ → ***Go to next question.***

a. What are the penalties and the circumstances under which they would be imposed?

Additional Comments

57. Are there any issues that have not been covered in this survey that you anticipate affecting the availability of public finding for cleanups in the next 5 years?

58. Are there any additional comments you wish to make regarding the issues in this survey or other matters related to USTs?

Thank you for completing the survey!

Please save this file now and send an e-mail with your saved questionnaire file and supporting documentation as an attachment to: USTSurvey@gao.gov.

Comments from the Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

Mr. John B. Stephenson, Director
Natural Resources and Environment
Unites States Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Stephenson:

Thank you for the opportunity to review and comment on the Government Accountability Office's (GAO) draft report entitled, "Leaking Underground Storage Tanks: EPA Should Take Steps to Better Ensure the Effective Use of Public Funding for Cleanups." The effective use of public funds, and more generally the effective cleanup of remaining releases, is a critical issue in the underground storage tank (UST) program. You presented a thorough and useful analysis of the issues and we think the report's recommendations are reasonable and helpful. The draft report makes four specific recommendations, and our response to each of them is as follows:

Ensure that states verify, on a regular basis, that tank owners and operators are maintaining adequate financial responsibility coverage, as required by RCRA:

EPA agrees that regular verification of financial responsibility coverage is important to ensure adequate funding for future releases. As you know, the Energy Policy Act of 2005 (EPAct) requires EPA or states, as appropriate, to conduct on-site inspections of USTs every three years to determine compliance with requirements imposed by Subtitle I of the Solid Waste Disposal Act. EPA is currently working on grant guidelines to implement those requirements. EPA's draft guidelines require that the inspections assess compliance with the financial responsibility requirements.

Improve the Agency's oversight of the solvency of state assurance funds to ensure that they continue to provide reliable financial responsibility coverage for tank owners:

EPA agrees that increased oversight of state assurance fund (state fund) solvency is necessary and important. As the report indicates, EPA recently developed a monitoring tool to assess the financial condition of state funds. We are working to improve implementation and utility of that tool. In addition, in response to EPAct, EPA is working on guidance to revise and improve our process for monitoring the financial

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soundness of state funds, and work with less solvent funds to improve solvency. EPA expects to complete this guidance in 2007.

Assess, in coordination with the states, the relative effectiveness of public and private options for financial responsibility coverage to ensure that they provide timely funding for the cleanup of releases:

EPA agrees an assessment of the relative performance of state funds (the primary public funding mechanism) and insurance (the primary private funding mechanism) would be informative and useful. EPA will consider conducting a study, in conjunction with the states, of the relative effectiveness of state funds and insurance in providing timely funding for cleanups.

Better focus how EPA distributes program resources to states, including LUST Trust Fund money, by:

- **ensuring that states are reporting information in their semi-annual activity reports that is consistent with EPA's definitions;**
- **encouraging states to review their databases to ensure that only data on the appropriate universe of underground storage tanks are being reported in their semi-annual activity reports; and**
- **gathering available information from states on releases attributed to tanks without a viable owner and taking this information into account in distributing LUST Trust Fund money to states.**

Each year EPA distributes LUST Trust Fund money, under an allocation formula that reflects state performance and need, using information reported by states in their end-of-year activity report. The information contained in these reports, including the number of releases and the population of active tanks, are relevant indicators of program need and program performance. Nonetheless, EPA agrees with GAO that it is important to ensure that the information used to support the LUST allocation formula is as accurate as possible. EPA will continue to work with regions and states to implement quality control measures and, in particular, work toward ensuring that reported data is consistent with existing EPA definitions and is limited to federally-regulated USTs. In addition, as we begin working on the Energy Policy Act requirements pertaining to the LUST Trust Fund allocation, EPA will work with regions and states to consider other changes to improve the distribution of future LUST money, including changes that more specifically reflect the need at abandoned LUST sites.

Thank you again for the opportunity to comment on your draft report and for your helpful recommendations. EPA will move forward to implement your recommendations as presented in this letter.

If you have any questions concerning our response, please contact Mark Barolo in the Office of Underground Storage Tanks at (703) 603-7141.

Sincerely,

Susan Parker Bodine
Assistant Administrator

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GAO Contact and Staff Acknowledgments

GAO Contact

John B. Stephenson, (202) 512-3841 or stephensonj@gao.gov

Staff Acknowledgments

In addition to the individual named above, Vincent P. Price, Assistant Director; Krista Breen Anderson; Jenny Chanley; Richard P. Johnson; Jerry Laudermilk; Jennifer Lutzy McDonald; Anne McDonough-Hughes; Rebecca Shea; Carol Herrnstadt Shulman; Dominique Sasson; and Nico Sloss made key contributions to this report.

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