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Key Points of Report

An Audit Report on the Petroleum Storage Tank Program at the Natural Resource Conservation Commission

February 2001

Overall Conclusion

Although state law requires the State to reimburse for costs associated with the cleanup of leaking petroleum storage tanks reported to the Natural Resource Conservation Commission (Commission) prior to December 23, 1998, the Commission does not have adequate resources to pay for all remaining eligible claims. The Commission needs an estimated \$189 million in additional funds to pay for reported claims. Under current Texas Water Code statutes, the Petroleum Storage Tank Remediation (PSTR) Fund will expire on September 1, 2003, and payments for eligible tank cleanups will cease after that time. Because the Commission also uses the PSTR Fund to finance most cleanups associated with the State-Lead Program, the Commission must develop a methodology for predicting future costs associated with that program.

Key Facts and Findings

- The Commission should take steps to improve its PSTR Fund expenditure projection process. The Commission will need to adjust current projections after it determines the status of nearly 27 percent of reported cases (1,845 of 6,947) for which no activity has occurred within the past 18 months. In addition, the Commission should consider historical payment amounts for unresolved reimbursement protest claims. Historical payment rates indicate that the Commission encumbers more than is eventually paid for such claims. Although the Commission's encumbrance process is appropriate for accounting purposes, encumbrance amounts should be adjusted for projection purposes to give a more accurate picture of available funds.
- Heavy caseloads and high employee turnover in the Responsible Party Remediation (RPR) Section limit the Commission's ability to actively monitor and review cases and expedite site closures. Average monthly closure rates have dropped by 42 percent since 1998. In addition, the Commission does not perform regular inspections and monitoring at sites being cleaned up or closed. Site inspection and monitoring are the Commission's strongest safeguards against fraud, but they appear to be a low priority because program resources are needed elsewhere.
- The Commission must improve its financial assurance compliance and enforcement efforts to ensure that the State will not be liable for future tank cleanup costs. The Commission's new strategy for limiting liability to the State for these future costs requires tank owner/operators to choose among certain financial responsibility options. While some large owner/operators are financially able to self-insure, most are turning to commercial environmental liability insurance. The Commission should work with the regulated community to ensure that tank owners are able to find suitable insurance to meet Commission requirements.

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This audit was conducted in accordance with Government Code, Section 321.0131, 321.0132, and 321.0133..

Executive Summary

The Petroleum Storage Tank Reimbursement (PSTR) Fund is \$189 million short of the amount needed to pay for the cleanup of remaining eligible leaking tanks. As required by state law, the Texas Natural Resource Conservation Commission (Commission) uses the PSTR Fund to reimburse tank owner/operators for leaking tank cleanup costs reported prior to December 23, 1998. Although the Fund will expire September 1, 2003, the State will be liable for a large number of reported cleanups still in progress.

The Commission will also need additional money to replace the PSTR funds it currently uses in the State-Lead Program to directly fund cleanups in which the responsible party is unknown, unwilling, or unable to pay.

The PSTR Program is making a transition from using the PSTR Fund for tank cleanups to depending on privately held insurance or other mechanisms to pay for leaking tanks identified in the future. As a result, the Commission should focus its efforts on strengthening these financial assurance initiatives so that future cleanup will not become a liability to the State.

Evaluate Present and Future Resource Needs to Ensure Cleanup of Leaking Petroleum Storage Tanks

The Commission should take steps to improve its PSTR Fund expenditure projection process. It will need to adjust the projections after it determines the current cleanup and/or claims status of 27 percent of the 6,947 reported eligible sites. The Commission is also unable to reasonably estimate the true fund liability for unprocessed original claims and unresolved protest claims. Historical payment rates indicate the Commission encumbers more than is paid eventually for such claims. Although the Commission's encumbrance process is appropriate for accounting purposes, encumbrance amounts should be

adjusted for projection purposes to give a more accurate picture of available funds.

Given the upcoming expiration of the PSTR Fund, the Commission must also place greater emphasis on forecasting the future needs of the State-Lead Program. The Commission does not have a meaningful estimate of the number of tanks that are either abandoned or not covered by insurance or other financial assurance mechanisms. The Commission should also strengthen the financial review process for State-Lead applicants to ensure they meet program eligibility standards.

Establish Appropriate Controls Over Disputed Reimbursement Claims

If the Commission settles any claims outside the regular protest process, it should develop and implement policies to govern the process. Through fiscal year 2000, the Commission settled \$17 million in disputed claims by paying in bulk those claimants with large numbers of disputed claims, without adequately documenting the claims review process used.

Focus Program Initiatives on Timely Cleanup and Closure of Leaking Sites

The Commission should focus efforts on timely case closure. Heavy caseloads and high employee turnover in the Responsible Party Remediation (RPR) Section limit the Commission's ability to actively monitor and review cases and expedite site closures. The RPR Section is responsible for investigating leak reports, conducting technical reviews of cleanup efforts, and authorizing closure of leaking sites.

Existing case coordinators do not have the time or resources to pursue overdue document submittals, which in turn delays reviews and closures. The Commission also

Executive Summary, continued

has no system in place to monitor required responsible party submissions and alert staff when submittals are due.

Because of staff turnover and vacancies, 1,944 of the 6,947 open cases are not assigned to a case coordinator for technical review. Over 20 percent of the unassigned cases are high priority, in which groundwater and human health are considered at risk.

Initiate On-Site Monitoring and Inspection of Leaking Tank Sites

Site inspection and monitoring are the Commission's strongest safeguards against fraud, yet they appear to be a low priority. The Commission rarely performs on-site monitoring or inspections while leaking sites are being cleaned. Likewise, when cleanup contractors submit a request for site closure to the Commission, it does not attempt to independently verify the site is ready to be closed. The Commission's efforts are concentrated instead on review of technical documents submitted by site contractors and reimbursement of eligible claims.

Improve Financial Assurance Compliance and Enforcement

The Commission should strengthen its inspection and enforcement of financial assurance violations. The Commission does not aggressively identify and pursue tank owners who do not have adequate financial assurance to cover cleanup costs in the event a leaking tank is detected. The Commission does not have the authority to seek criminal penalties against owner/operators who knowingly operate storage tanks without the required financial assurance, making it difficult to initiate enforcement proceedings.

Since the PSTR Fund will expire soon, the Commission is depending on tank owner/operators to secure privately held insurance or other financial means to pay for future leaking tanks. Reducing the State's

liability for future cleanups depends heavily on the success of the Commission's new Self-Certification Program, which requires owner/operators to submit annual proof of financial assurance.

Develop a Comprehensive Plan and Strategies for Self-Certification Program Implementation

Although the Commission has made some progress in implementing the Self-Certification Program, Commission management has not fully developed an action plan or strategies for program implementation.

The Self-Certification Program is intended to ensure that registered tank owner/operators are in compliance with all of the Commission's technical upgrade and financial assurance requirements.

Summary of Management's Response

Management generally concurs with the recommendations in this report and has already begun to implement a number of them. The Commission has noted that its calculations for determining the total shortfall for the PSTR Fund are different than State Auditor's Office calculations. Specific responses describing the corrective actions and implementation dates follow each recommendation. The Commission's transmittal letter is included immediately preceding Appendix 1.

Summary of Objective, Scope, and Methodology

The objective of the audit was to evaluate the general condition and effectiveness of the Petroleum Storage Tank (PST) Program. The overall audit objectives focused on:

Executive Summary, concluded

- Commission efforts to analyze PST Program current and future resource needs.
- Commission's evaluation of site cleanup and closure activities.
- Self-Certification Program implementation and financial assurance initiatives to lower future liability to the State.

The scope of the audit included consideration of past and current legislation, audits and special studies, Commission control systems, and related program policies and processes.

The methodology for this audit consisted of performing audit tests and procedures, collecting financial and program information, and analyzing and evaluating the results against established criteria.

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Section 1:

Evaluate Present and Future Resource Needs to Ensure Cleanup of Leaking Petroleum Storage Tanks

What is the PSTR Fund?

The Texas Legislature created the Petroleum Storage Tank Remediation (PSTR) Fund in 1989 to pay for petroleum storage tank cleanups. The fund consists of delivery fees paid by bulk distributors of gasoline and other specified fuels. The fund reimburses owner/operators or other responsible parties for the costs of cleaning up leaking tanks. It also pays directly for tank cleanups when the responsible party is unknown, unwilling, or unable to pay.

The Legislature has established the following time frame for the use and eventual elimination of the fund:

December 31, 1995	Tanks must be registered by this date to be eligible for fund assistance.
December 23, 1998	Storage tank leaks reported on or after this date are not eligible for fund assistance.
March 1, 2002	Delivery fee expires; Comptroller stops collection.
September 1, 2003	Fund shuts down; no further reimbursement payments can be made.

Although state law requires the State to reimburse for costs associated with the cleanup of leaking petroleum storage tanks reported to the Natural Resource Conservation Commission (Commission) prior to December 23, 1998, the Commission does not have adequate financial resources to pay for remaining eligible claims. The Petroleum Storage Tank Remediation (PSTR) Fund is \$189 million short of the estimated \$360 million needed to pay for the cleanup of sites currently in various stages of remediation. (See text box at left.)

In addition to reimbursing owner/operators for cleaning eligible leaking tanks, the PSTR fund currently pays for most State-Lead Program cleanups where the responsible party is unknown, unwilling, or unable to pay.

The PSTR Fund is scheduled to be phased out by September 1, 2003. However, the State will still be liable for paying to clean up future leaking tanks through the State-Lead Program and so it must identify alternative funding sources. To ensure effective State-Lead

Program planning and management, the Commission must adopt a sound methodology for predicting future cleanup costs.

Section 1-A:

Ensure Adequate Financial Resources Exist to Reimburse All Eligible Leaking Petroleum Storage Tank Sites

The PSTR Fund needs an estimated \$189 million in additional funds so the Commission can pay for eligible tank cleanups as required under current law. (See Table 1.)

Table 1

Estimated PSTR Fund Shortfall (as of September 1, 2000)				
Number of Open Sites	Estimated Cleanup Costs	PSTR Fund Cash Balance	Obligated PSTR Funds	PSTR Fund Shortfall
6,947	\$ 360 million	\$ 228 million	(\$ 57 million)	\$ 189 million

Source: Uniform Statewide Accounting System (USAS) and Commission Cost Projection Model

Since its inception, the PSTR Fund has paid \$815 million in reimbursements to the owner/operators of over 15,000 leaking petroleum storage tank sites. However, as of September 30, 2000, 6,947 eligible sites were still classified as open cases in various stages of cleanup.

Using a projection methodology originally developed by Commission staff, we estimate \$360 million in cleanup costs for the remaining eligible sites. (See Appendix 3 for a breakdown of cost projections.)

According to the Comptroller of Public Accounts (Comptroller), the PSTR Fund's cash balance on September 1, 2000, was \$228 million. The State Auditor's Office estimates fund encumbrances, or obligations, of \$57 million, leaving only \$171 million available to pay for cleanup of the remaining eligible sites. This is \$189 million short of the necessary \$360 million estimate.

Virtually no new fee money will be deposited into the PSTR Fund before it expires. The Comptroller collects gasoline and fuel delivery fees and deposits them into the PSTR Fund to finance tank cleanups. The Comptroller is required by current law to stop collecting fees when the Fund reaches \$100 million dollars, excluding any obligated funds (such as already approved cleanup claims and administrative expenses). The Comptroller may not resume collecting fees until the unobligated balance drops below \$25 million. The PSTR Fund exceeded the \$100 million threshold in September 1999, and fee collections were stopped. Based on State Auditor's Office projections, the Fund is not expected to drop below \$25 million until one month before the fee expires, effectively freezing available funds at current levels. Given no new money, projections show the Fund's cash balance to be completely depleted by January 1, 2003.

Recommendation:

Work with the Legislature to determine the feasibility of extending the PSTR Fund to pay for all known eligible claims.

Management's Response:

The TNRCC is working with the legislature during the current session to determine the feasibility of extending the PSTR Fund to pay for all known eligible claims.

The TNRCC and the SAO have differing final calculations for PSTR Fund shortfall. The SAO used a "discount" on in house claims as a basis of their calculation. The TNRCC used the actual dollar amount as a basis of their calculation.

The TNRCC and the SAO also have differing calculations for the subparts of the remediation phase. This difference results because the auditor looked at a discrete period of time to arrive at a percentage of each subpart of remediation, while the TNRCC looked at a cumulative "complete" remediation phase. The TNRCC's objective is for each site to complete remediation and reach closure. Once a site has

completed RAP feasibility and is in RAP prep, it is necessary to progress to RAP installation and O&M. For this reason the TNRCC supports 10% as a more representative number of sites that will progress through the complete remediation phase (feasibility, preparation, installation and O&M) towards closure.

Please also note that the projection made by the SAO does not factor in costs associated with MTBE. Should we be directed to remediate MTBE contamination, we estimate that cleaning up MTBE contaminated sites could increase costs by 40% in the assessment and remediation phases of corrective action.

Finally, due to the many uncertainties related to predicting the future resources needed, we request the SAO conduct a followup review of projections at some point in the future.

Section 1-B:

Improve Fund Projections Process

Using information from its SMARTMAPS database, the Commission projects PSTR Fund expenditures based on average amounts pre-approved for different stages of tank cleanup. The Commission should take steps to improve its PSTR Fund expenditure projection process, so that future projections will more accurately consider the following:

- The Commission lacks current information on the status of nearly 27 percent of reported cases. The Commission has had no contact for 18 months with 1,845 of the 6,947 open cases. If the owner/operators at these sites do not intend to pursue PSTR reimbursement claims, the fund's cost projections could be reduced from \$360 million to \$293 million. (See Table 2 below.) State Auditor's Office estimates of projected costs can be reduced if additional sites that never applied for pre-approval of cleanup costs are also excluded from the projection. However, the Commission cannot merely assume claims will not be filed; it must actively attempt to contact responsible parties to determine the status of these sites.

Table 2

Open Sites That Have Had No Recent Contact With the Commission (as of September 1, 2000)			
Number of Open Sites	Number of Open Sites With No Contact for 18 Months	Projected Cleanup Costs Including All Sites	Projected Cleanup Costs Excluding Sites Where No Contact Has Been Made
6,947	1,845	360 million	\$293 million

Source: Commission SMARTMAPS Database, Responsible Party Remediation Section

- It is difficult to estimate fund liability for unprocessed claims and unresolved protest claims.¹ The Commission currently encumbers the full amount of unprocessed and unresolved claims. This is an appropriate process for accounting purposes, but could potentially overestimate the Fund's obligated balance for projection purposes.

For example, in the first two months of fiscal year 2001, the Commission encumbered \$82 million for all claims submitted. Of the \$82 million, \$73 million was for first-time unreviewed claims or unresolved protested claims. Using historical payment rates developed by the Commission, we estimate that only \$57 million of this \$82 million will actually be paid. Therefore, we reduced the encumbered amount to historical payment levels in estimating the available fund balances. (See Table 3 below.)

Table 3

Encumbrances for the First Two Months of Fiscal Year 2001			
Types of Encumbrances	Amount of Submitted Claims (all encumbered by Commission)	Historical Payment Rate	Estimated Payout
Approved claims not paid	\$ 9.0 million	100%	\$ 9.0 million
Submitted claims not reviewed	\$ 17.2 million	61%	\$ 10.5 million
Protested claims not resolved	\$ 55.7 million	68%	\$ 37.9 million
Total	\$ 81.9 million		\$ 57.4 million

Source: Commission SMARTMAPS Database, Reimbursement Section

Recommendations:

- Make an active effort to contact the sites the Commission has not heard from to determine the status of work to be performed. Remove from the list of open leaking tanks any site for which no activity is expected, or for which no further contact occurs.
- Consider historical payment rates to estimate fund liability.
- Make an effort to process unresolved protest claims to better determine the true amount of liability for the PSTR Fund.

Management's Response:

- *The TNRCC is making an effort to update the status of these sites. As a result, the current number of stalled sites has been reduced from 1,845 to 860. The population of 1,845 sites declared as stalled were those the database showed*

¹ Unresolved protest claims are previously denied claims that have been resubmitted by responsible parties for payment. When these resubmitted claims are received by the Commission, they are encumbered at 100 percent, regardless of their previously denied status.

as not having submitted either proposals for new work or certain specific technical reports on completed work within the preceding 18 month period. The sites removed from the stalled list (985) were removed because they have either submitted something of possible substance to the agency or have received their last directive (and thus may be in the process of completing that directive) within the last 18 months. The remaining population of 860 sites remain categorized as stalled.

- *We don't disagree with the SAO's calculation regarding the historic payment rate. However, the TNRCC does disagree with a reduction or discounting of the submitted claims by the historic payment rate for projection purposes. The issue is that the calculation has been applied as a discounting of the agency's projected monetary needs. Because the payment rate has fluctuated over time and is currently above the historic payment rate, the TNRCC estimates that the use of the SAO's calculated payment rates could lead to an underestimation of the program's funding needs. Our payment rate is higher now because of outreach efforts, use of the preapproval process and the use of cost guidelines. In summary, we don't disagree with the calculations, we disagree with applying the discounted rate for future encumbrances.*

Due to the many uncertainties related to predicting the future resources needed, we request the SAO conduct a followup review of projections at some point in the future.

- *The TNRCC and a PST private contractor are currently processing unresolved protested applications. This effort is expected to be an ongoing process.*

Section 1-C:

Place Greater Emphasis on Forecasting the Future Needs of the State-Lead Program

The Commission needs to make additional progress in projecting future costs for the State-Lead Program. It is very important to focus attention on the future needs of the State-Lead Program. When the PSTR Fund is eventually phased out, the Commission will require resources to pay for cleanups where responsible parties are unknown, unwilling, or unable to pay. Out of \$125 million paid out by the fund in fiscal year 2000, state-lead payments accounted for approximately 4.6 percent, or \$5.8 million.

The Commission's difficulty in projecting state-lead cleanup needs for the future may be due to the substantial and immediate effort required to manage the large volume of identified leaking tanks eligible for PSTR funds. The Commission has focused its resources here rather than on forecasting future costs.

Future leaking tanks add liability for the State. Leaking tanks that are identified in the future may pose a significant financial burden to the State. Problems in identifying and funding these cleanups exist because:

- The Commission has no meaningful estimate of the number of tanks that are not covered by insurance or other financial assurance mechanisms. Only two leaking sites have entered the State-Lead Program where the release was reported on or after December 23, 1998. Neither tank owner/operator has the financial ability to pay for cleanup costs. The Commission has not identified any other reported leaking tanks that are ineligible for reimbursement in which the responsible party lacks adequate financial ability to pay for cleanup. This is because the Commission does not determine if responsible parties have financial assurance as soon as possible after determining that a leak exists. Consequently, it is possible that a reported leaking tank may leak for years without the Commission's knowledge that the owner/operator lacks financial assurance.
- There are a large number of abandoned tanks, some of which will require site assessment and remediation work in the future. The number of abandoned and/or unregistered tanks is unknown. Interviewed Commission personnel unanimously agree that a large number of tanks exist that are abandoned, unregistered, or both. The Commission has recently begun working on cost projections for such tanks.

What is the LUST Trust Fund?

The federal Resource Conservation and Recovery Act (RCRA) created the Leaking Underground Storage Tank (LUST) Trust Fund in 1986. It provides money to states to enforce and oversee corrective action at leaking sites. LUST money cannot be used to cover direct cleanup costs unless the responsible party is unknown, unwilling, or unable to respond, or unless a situation requires emergency action.

When the LUST Trust Fund is used to pay for direct cleanup costs, all such costs can be recovered from the responsible party, including legal and administrative expenses. However, cost recovery usually does not occur in cases in which the responsible party is determined to be financially unable to pay.

- When a responsible party lacks financial resources, the unavailability of PSTR funds for cleanup cost reimbursement on post-1998 leaking tanks is a disincentive to reporting a leak or suspected leak, or for taking corrective action. In these cases, responsible parties have no incentive to report leaks or suspected leaks, or to take corrective action once leaks are identified. The Commission does not appear to have any immediate plan for dealing with this potential problem.

Written guidelines for the use of current state-lead funding sources should be developed. The Commission does not have written policies and procedures for determining which of the two current state-lead funding sources should be used

to clean up specific sites. In addition to the PSTR Fund, which is scheduled to be discontinued, the Commission uses the federal Leaking Underground Storage Tank (LUST) Trust Fund. (See text box above.) Without clear policies and procedures, it is difficult to know if the Commission appropriately uses PSTR funds or maximizes use of the LUST Trust Fund. Additionally, it is not clear who has final authority for making fund-use decisions.

Financial review for state-lead applications could be improved. The Commission's current process for reviewing financial information is appropriate and

achieves program goals. However, the Commission could make additional progress in strengthening the process by making the following enhancements:

- Financial review policies and procedures should be formalized. Current policies and procedures that detail the financial review process do not exist. Procedures for reviewing an applicant's financial information would ensure a thorough review and consistent treatment of applicants.
- Cash flow should be considered as a criterion. An applicant's ability to pay all or a portion of site assessment, monitoring, or remediation costs through current income or cash flow is not a standard criterion for gaining admission into the State-Lead Program. On the other hand, cash flow is considered in financial reviews the Commission conducts to determine a party's ability to pay penalties or fines that have been assessed through enforcement actions. Merely analyzing tangible net worth will not necessarily be sufficient to identify whether an applicant still generates cash. Evaluating this cash flow would provide the Commission with better information in determining a party's ability to contribute to cleanup costs.
- Financial data should be verified regularly. The Commission does not consistently verify financial information submitted by applicants. This is due, in part, to the inherent difficulty of verifying some financial information. Additionally, creditors of state-lead applicants are often unwilling to release requested information. To strengthen the financial review process, the Commission should consider using a separate financial disclosure form, which includes the applicant's written permission for creditors to release information and specific account information. A similar disclosure form is used in the Enforcement Division's financial review process.

Recommendations:

- Develop comprehensive projections for the State-Lead Program. A statistical analysis of potential abandoned sites could be made, with the understanding that some of these sites will leak and require cleanup at some time in the future.
- Develop funding source policies and procedures. The Commission's policy regarding the circumstances under which the LUST and PSTR funds are used should be formalized. Policies and procedures identify which funding source to use for a particular leaking petroleum storage tank situation; assign decision-making authority for decisions concerning which funding source will be used; and describe the overall process that will be followed in cases where new leaking tanks are not covered by appropriate financial insurance.
- Strengthen the state-lead financial review process. Develop financial review policies and procedures that apply more consistent standards for applicants. Additionally, consider an applicant's current cash flow as a further criterion for acceptance into the program, consistently verify applicant financial

information when possible, and use a separate financial disclosure form similar to the one used in the Enforcement Division's financial review process.

Management's Response:

- *The State Lead program has a process for verifying whether a party is financially unable to pay before they can be admitted into the State Lead program. This process includes a determination of whether they have financial assurance or not. We will formalize this process in writing this fiscal year. However, it is important to note that the vast majority of known leaking tank sites are still using the PSTR fund for reimbursement of cleanup dollars as opposed to their own financial assurance. The TNRCC is working on projections for the State-Lead program taking into consideration a couple of factors: 1) longevity of the reimbursement fund and 2) MTBE cleanup policy.*
- *TNRCC will develop a funding source policy and procedure. This policy will establish which funding source should be used for various circumstances. This effort is expected to be completed by August 31, 2001. Furthermore, for post December 1998 leaking tanks that do not have financial assurance, TNRCC Financial Assurance will evaluate the ability to pursue civil enforcement action, shutdown (which requires the AG to file suit), and criminal enforcement (if the criminal provisions are restored by the Legislature). In addition, cost recovery will be evaluated pursuant to the SAO's next recommendation.*
- *As noted in the SAO report, consistent written policies and standards for the financial review process for those sites eligible for the PSTR Fund are appropriate and achieve program goals. These written policies and procedures have been in place and used since 1995. We have the staffing to process this type of less intensive review. However, we do not have adequate staff to do the more detailed reviews (similar to those done for Superfund sites) with PSTR eligible sites. With additional resources, the Financial Assurance Unit could implement the same policies and procedures used to conduct financial reviews for Superfund settlement. Those established procedures consider cash flow and require financial disclosure forms granting permission to verify financial information.*

Section 2:

Establish Appropriate Controls Over Disputed Reimbursement Claims

Through fiscal year 2000, the Commission reimbursed over \$17 million for disputed protested claims through an undocumented settlement process. This process lacks appropriate safeguards or controls to ensure protested claims are resolved consistently and fairly.

The Commission's Reimbursement Section is responsible for ensuring that reimbursement payments are made only for claims for which cleanup costs have been pre-approved. When all or part of a claim is denied, the responsible party can protest the decision. The Commission then reevaluates the claim. As of October 1, 2000, the amount of protested claims totaled \$56 million.

In some cases, in an effort to reduce backlog, the Commission has used an informal settlement process to pay previously denied claims in bulk. A noted example of this occurred recently when several major oil companies had large numbers of backlogged protest claims. Normally, protest claims are individually reviewed once all of a claimant's original claims have been processed. However, these companies negotiated a settlement in which the Commission paid each company's protested claims as a package, without adequately documenting the claims review process used. For all settlements, one employee has been responsible for the entire process including review, decision-making, and approval, without using formalized policies and procedures. The State Auditor's Office has identified 1,479 "settled" claims totaling \$17,445,400.

The Commission has suspended the practice of settling claims.

Recommendation:

Develop and implement policies and procedures to document the settlement process, if it is used in the future to reduce the backlog of protested claims. Also, develop an internal control process that provides a method for resolving all claims consistently and fairly, and ensure proper segregation of duties.

Management's Response:

At this time, the TNRCC does not intend to reinstate the settlement process. Should we decide to continue to use this process, we will review and revise the protest resolution standard operating procedure.

Focus Program Initiatives on Timely Cleanup and Closure of Leaking Sites

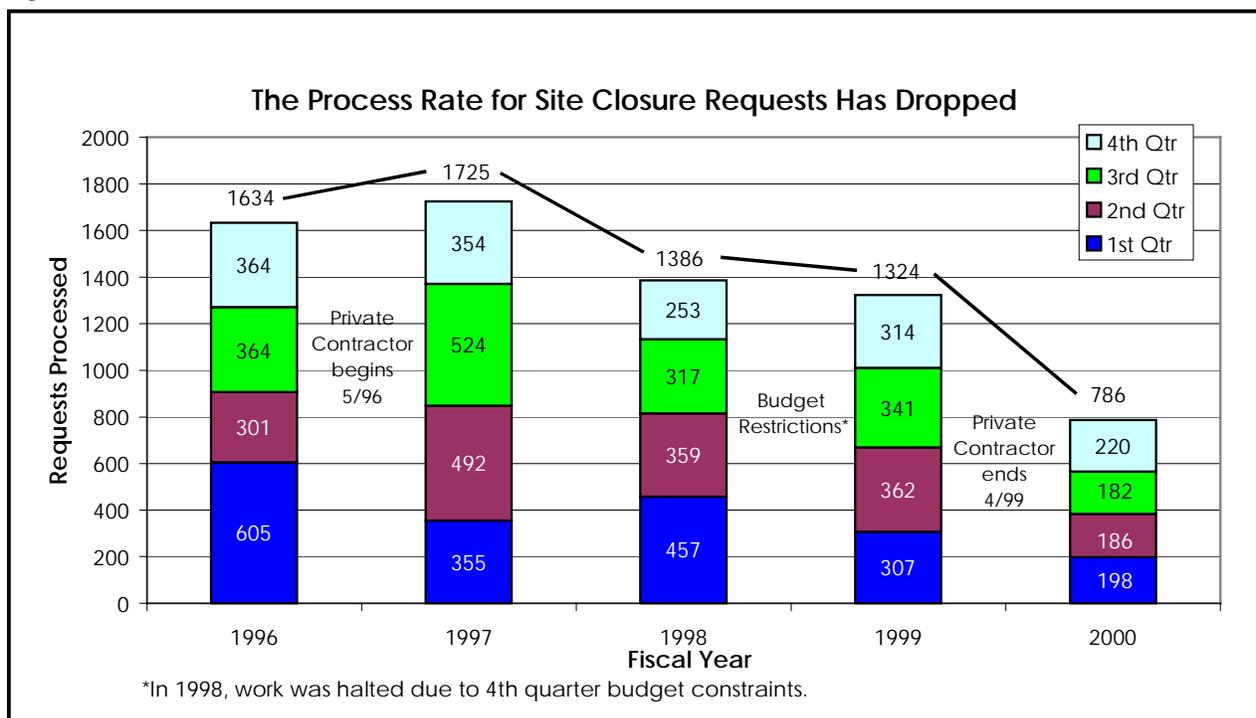
The Commission has not ensured timely cleanup and closure of leaking sites. The Responsible Party Remediation (RPR) Section cannot ensure that open cases progress in a timely manner, nor can it expedite the closure of cleaned up sites. The RPR Section is responsible for investigating leak reports, conducting technical reviews of cleanup efforts, and authorizing the closure of leaking sites.

To ensure site cleanups progress in a timely manner, the program staff must receive case documents and reports when they are due. Documentation requires Commission review and response, so any overdue submittals inevitably result in delays in the cleanup and closure of sites. For example, when a possible leak is discovered, a Release Determination Report (RDR) must be submitted to the Commission within 30 days to confirm or deny the actual existence of a leak. In 33 percent of cases since 1998, the RDR was submitted 90 days or more after the potential leak was detected, resulting in a minimum of 60 days of lost cleanup time.

Currently, the Commission has no system in place to monitor required responsible party submissions due on open cases. Staff members wait for the required documentation, with no way of knowing when submittals are past due. In previous years, responsible parties had an incentive to submit required documentation on time because new leaking sites were still eligible for reimbursement from the PSTR Fund if they were reported prior to December 23, 1998.

Due to heavy caseloads and high turnover rates in the RPR Section, case coordinators are unable to actively pursue overdue submittals. As a result, the Commission's closure rates are falling. (See Figure 1 on page 15.) For example, top priority cases involving groundwater contamination and risk to human health have been open, on average, for seven and a half years. This is more than three and a half years longer than the time it took to close similar cases in the past. Average monthly closure rates have dropped by 42 percent since 1998, when the average was 116 cases closed per month. The case closure average for fiscal year 2000 was only 67 sites closed per month. This difference may be because the Commission out-sourced some of the RPR Section's technical review and correspondence activities to a private contractor prior to fiscal year 2000, increasing review and closure rates during that period. Using a private contractor had a positive effect on closure rates.

Figure 1



Source: Commission SMARTMAPS database, Responsible Party Remediation Section

Section 3-A:

Assign All Open Cases to Case Coordinators or Other Commission Representatives to Ensure Timely Progress

The PSTR Program currently operates in a reactive manner. That is, the RPR Section is not equipped to actively ensure timely cleanup and closure of leaking tanks. The program staff does not initiate client contacts, nor does it proactively perform work duties and responsibilities.

As of September 1, 2000, 6,947 cases are open and in various stages of review or cleanup. Of the open cases, 1,944 are not assigned to a case coordinator for technical review. Over 20 percent of the unassigned cases are high priority cases, in which groundwater and human health are considered at risk. Additionally, 66 percent of the unassigned cases show no correspondence between the responsible party and the Commission within the last year.

Failure to assign case coordinators may occur for the following reasons:

- A lack of policies and procedures exists for case assignment. The Commission does not have policies and procedures that outline requirements for how or when cases are assigned (or reassigned) to case coordinators. According to agency staff, if a case coordinator leaves the program, his or her cases are redistributed to other coordinators only if the cases have pending

correspondence or submittals that must be reviewed. This lack of consistency regarding case assignment criteria results in poor caseload management, and creates a risk that high profile or other necessary reviews will not occur.

- Case coordinators have heavy caseloads. Case file assignments are also made based upon coordinators' abilities to handle the additional workload. Current experienced case coordinators appear to be working at maximum capacity, which might explain why additional cases have not been assigned. Current experienced case coordinators in Texas have an average caseload of 230 cases. If all unassigned cases were distributed to case coordinators, caseloads would increase to between 300 and 400. Given such heavy case coordinator workloads, appropriate reviews and timely responses are unlikely.
- Inexperienced junior staff members are unable to review more complex case files. When senior staff leave, the Commission generally hires entry-level employees to fill the vacancies. These junior staff members do not possess the technical knowledge and experience needed to work higher priority or more difficult cases. Caseloads for entry-level case coordinators average 55 cases per coordinator, compared to the average of 230 cases for more experienced case coordinators. Without adequate training modules and the ability to hire more experienced staff, the RPR Section is hampered in its cleanup and closure efforts.
- Turnover rates are high. High staff turnover rates also contribute to case assignment problems. Case coordinator positions experienced a 29.7 percent turnover rate in fiscal year 2000 alone. This percentage is 12.1 percent higher than the overall statewide rate of 17 percent for fiscal year 1999. The RPR section has lost five additional employees since September 1, 2000.

Recommendation:

Recommendations for this section are combined with the recommendations in Section 3-B.

Section 3-B:

Pursue Overdue Submittals

Case coordinators in the RPR Section respond to case file submittals only when they are received by the Commission. Required submittals are not actively pursued, even when responsible parties fail to meet submission deadlines set by the Commission.

Twenty percent of cases assigned to case coordinators show no correspondence between the responsible party and the Commission in over a year. The more time that passes without individual case activity, the less progress the Commission makes toward site cleanup and closure efforts.

Case coordinators are heavily occupied with simply responding to correspondence that is submitted by responsible parties. On average, case coordinators handle high

priority correspondence within 30 days after receipt. However, average response time for lower priority correspondence is 144 days. For example, in the last two years, it has taken case coordinators an average of 299 days to respond to deadline extension requests and 173 days to respond to tank closure reports. Because case coordinator efforts must be focused on the high volume of reports and submittals they already received, it is expected that they would lack the time to actively pursue overdue submittals.

In addition, the Commission has not established any standard in program policy or elsewhere to suggest that coordinators *should* pursue overdue submittals.

Finally, there is no simple way for case coordinators to track submittals that are due. The database the Commission uses to track and respond to submittals does not have any way to “flag” overdue documents or reports.

Recommendations:

- Consider using a private contractor for technical review of existing cases in order to facilitate cleanup efforts and make progress on site closure efforts.
- Develop a reminder program that automatically prompts case coordinators when case submittals are due or past due. Consider including this feature in the PST Program’s new database currently in development.
- Develop a policy that defines the methods case coordinators should use to follow up on report and correspondence submittals.
- Develop policies and procedures that set out the requirements for assignment and reassignment of site case files. Such policies and procedures should include mechanisms for improving case management, with special emphasis on prioritizing case needs and improving review and response efforts.
- Assign all open case files to a case coordinator or other Commission representative.
- Review submittal requirements and eliminate any non-priority submittals determined to be unnecessary.

Management’s Response:

Much of the time line for field work at sites is driven by the private consultant/contractor industry resources and scheduling conflicts due to limited equipment. In addition, some consultants have over a hundred sites and can only work on several at a time.

Most of the emergency abatement work performed at sites with impacted or imminently threatened receptors (such as drinking water wells or utility trenches) is

completed by the State Lead Emergency Response coordinator and her on-call contractors. The emergency abatement activities commence quickly and continue until the immediate threat to human health and safety is negated. At that point, coordination is assigned to a RPR coordinator. Therefore, there will generally be no overdue submittals on sites with impacted or imminently threatened receptors because State Lead Emergency Response has, through emergency abatement activities, dealt with the immediate threat to human health and safety.

A lack of adequate staffing resources prevent the agency from routinely pursuing submittals on most overdue cases. However, the Field Operations Division (FOD) recently inspected over 200 stalled sites. Further, FOD is planning a special initiative for inspection of additional high priority sites.

- The TNRCC has drafted a plan for addressing stalled sites, which may include some contractor assistance through the State Lead program. Portions of this plan are being implemented now and we should know whether contractor assistance will be necessary by the end of April 2001.*
- The TNRCC will evaluate initiating a reminder program within the existing database. However, much of the activity at sites is dictated by the consultant/contractor industry resources and their related equipment scheduling limitations. This evaluation will be completed by August 31, 2001.*
- Current practice, as documented in staff performance plans, requires that report and correspondence submittals be entered into the PST-RPR database and normally assigned to a case coordinator. Those pending documents are tracked daily on a computer printout distributed to case coordinators and their supervisors. Most of the documents received are tracked for either a mandatory 30-day report review period or a 60-day target report review period. Current staffing and experience levels are insufficient to meet these deadlines for the active sites, let alone pursue the stalled sites. This practice will be documented in a written policy and procedure by August 31, 2001.*
- Current practice, as documented in staff performance plans, is to assign all sites that are active or which have impacted or imminently threatened a receptor. Factors that are considered in case assignment include case coordinator experience, assigned workloads, phase of corrective action, and responsible parties (large blocks of sites belonging to single responsible parties are assigned to one or a few coordinators to enhance efficiency and consistency). This practice will be documented in a written policy and procedure by August 31, 2001.*
- The TNRCC could assign all sites. However, due to current staffing and experience levels there would be inadequate resources to actively pursue the stalled sites. Assigning all sites to current coordinators could only increase staff turnover. Therefore, we will implement this recommendation when staff resources are adequate to handle the caseloads.*
- The TNRCC will reevaluate submittal requirements and make adjustments, if necessary. This will be completed by August 31, 2001.*

Section 4:

Initiate On-Site Monitoring and Inspection Activities at Leaking Petroleum Storage Tank Sites

The Commission rarely performs on-site monitoring or inspections while corrective action contractors are conducting site cleanup and closure activities. Site inspection and monitoring by regional inspectors or other Commission staff are the Commission's strongest controls for preventing fraud in the Petroleum Storage Tank Program. However, the Commission places a low priority on such activities. Its efforts are concentrated instead on review of technical documents submitted by site contractors and reimbursement of eligible claims.

Section 4-A:

Perform Oversight of Cleanup and Closure Activities

The Commission does not conduct regular oversight activities at leaking tank sites. Regional office inspectors do not routinely visit sites that are in various stages of cleanup. Likewise, when a cleanup contractor submits a request for site closure, no attempt is made to independently verify that the site is ready for closure. Regional field inspectors concentrate primarily on inspections that ensure compliance with storage tank upgrade and financial assurance requirements.

The Commission relies solely on data and reports submitted by responsible party cleanup contractors to determine that cleanup work was completed properly. The Commission does not use split sampling or other means to independently verify laboratory information received from corrective action cleanup specialists. (See text box at right.)

There is an inherent risk that information submitted by cleanup contractors is inaccurate. Without using some verification method, the Commission cannot confidently use reported analytical results to make decisions regarding site closure readiness. Doing so increases the risk that leaking sites may close before cleanup efforts produce acceptable results or, conversely, that they may stay open long after cleanup requirements are satisfied.

Split Sampling

Split sampling occurs when two independent entities take samples from the same location and send them to different laboratories. This process helps to guarantee that laboratory results are correct, and it prevents and assists in the detection of incorrect or fraudulent reports to the Commission.

Recommendations:

- Conduct periodic site inspections to ensure adequate site cleanup progress and appropriate site closures. Without on-site inspection and monitoring, the Commission depends entirely on the regulated community to actively clean

up leaking sites and to correctly and honestly report laboratory results upon which site closures are based.

- Implement split sampling or other methods to independently verify lab results. (See Section 7-B for other recommendations regarding laboratory data integrity.)

Management's Response:

- *The Field Operations Division (FOD) would be the TNRCC division most appropriate to accomplish the recommended tasks. However, due to the lack of resources needed to accomplish all tasks before this division, FOD has been forced to prioritize investigation activities.*

While follow-up of sites which have already reported a confirmed release is an important activity, investigation of active sites which still contain a possible contaminant source (tanks) for compliance with upgrade requirements is a way to attempt to prevent facilities from having a confirmed release. With the current emphasis on compliance of active facilities, the goal is to be proactive and possibly correct a mechanical problem before it becomes an environmental problem, rather than simply be reactive and respond to the releases once they have occurred. This, we feel is a more productive and environmentally protective use of our limited resources.

Resource data: According to the FOD Staffing Pattern database there are 36 investigators employed by the TNRCC who are responsible for conducting PST-related investigations.

- *Besides the 6,947 (Audit Report's Executive Summary, Evaluate Present and Future Resource Needs to Ensure Cleanup of Leaking Petroleum Storage Tanks) eligible LPST sites, these same investigators are also responsible for conducting compliance evaluation inspections at approximately 23,513 regulated facilities. In addition, these same investigators are responsible for conducting investigations for construction activities related to Underground Storage Tank (UST) systems and citizen complaints.*
- *Requirements for Stage I Vapor Recovery Equipment for East Texas and along the I-35 corridor were effective April, 2000 for which investigations will also be necessary. The regional offices affected by this new requirement are: Arlington, Tyler, Waco, Beaumont, and Houston.*
- *In the non-attainment areas of the state (Dallas/Fort Worth, Houston/Galveston, Beaumont, and El Paso) these investigators are also responsible for conducting investigations of Stage II Vapor Recovery Equipment at PST facilities.*

- *In the non-attainment areas of Dallas/Fort Worth and Houston, the investigators are responsible for conducting Test Observation Inspections during annual and five year system tests of Stage II Vapor Recovery Equipment.*
- *In some of the smaller regional offices throughout the state the investigators are also responsible for conducting investigations in other non-PST program areas such as Municipal Solid Waste and Industrial and Hazardous Waste in order to meet Legislative Budget Board commitment requirements for all programs.*

Inspection prioritization data:

The inspection strategy for compliance evaluation inspections is as follows (in order of priority):

1. *Modified Compliance Evaluation Investigation (CEIMOD) - facilities receiving State funds (State Lead Sites) for cleanup should be priority while we continue working through the list provided by the Registration and Evaluation Division to focus on facilities which appear to be out of compliance with Releases Detection, Spill and Overfill requirements, Cathodic Protection, and Financial Assurance requirements.*

2. *Full Compliance Evaluation Inspection (CEI)*

3. *Confirmed Out-of-Service Tanks (OOFS) - currently in the process of revising policies and procedures regarding out-of-service facility investigations*

** Risk-based criteria should be applied to a PST facility in the following order:*

1. *Is the facility in State Lead remediation?*

2. *Is the facility on the Registration and Evaluation Division Release Detection and/or Spill and Overfill List?*

3. *Compliance history - Does the facility have a history of significant non-compliance?*

4. *Location - Is the facility in an area of environmental concern (sensitive receptors)?*

5. *Geographic Area (town, zip code, major intersection)*

As stated in the inspection strategies, if a facility is involved in site remedial activities which are being overseen by the State Lead Team of the Site Assessment & Management Section (Remediation Division, Office of Permitting Remediation & Registration) that is the top risk-based criteria for a facility receiving a CEI. Many times, it is a CEI which triggers the referral

to State Lead for initiation of remedial activities at an LPST (potential and/or confirmed) site.

- *On a site-specific, as-needed basis, the Remediation or Field Operations Divisions will use split sampling to independently verify sample test results. Reasons for conducting split sampling may include surveillance of a Corrective Action Specialist or Corrective Action Project Manager or unreliable/questionable data previously submitted for a particular site or by a specific laboratory.*

Section 5:

Improve Financial Assurance Compliance and Enforcement

The Commission does not aggressively identify and pursue tank owners who do not have adequate financial assurance to cover cleanup costs in the event a leaking tank is detected. Ensuring compliance with financial assurance requirements is important in lowering the risk that state funds will be required to pay for leaks identified in the future.

The Commission does not have the authority to seek criminal penalties against owner/operators who knowingly operate storage tanks without the required financial assurance, making it difficult to initiate enforcement proceedings.

Section 5-A:

Strengthen Processes for Identifying and Enforcing Financial Assurance Violations

Financial assurance regulations exist to ensure that future cleanup costs will not be borne by the State of Texas. The Commission has methods in place for identifying and addressing financial assurance violations. However, these methods could be improved by strengthening the systems used for identifying violations, and by involving the Enforcement Division when financial assurance violations do occur. If financial assurance violations are not consistently identified, and enforcement actions are not initiated when violations are discovered, the risk increases that violations will continue. Violations will likely decline only if there are real consequences for failure to comply with requirements.

House Bill 2587, which was adopted by the Texas Legislature in 1995, gives the Commission authority to enforce financial assurance requirements and impose administrative and civil penalties for violations. Without proper enforcement when violations are identified, it will be difficult for the Commission to determine if financial assurance requirements are met in the long term.

The Commission has a process in place for verifying compliance. The Commission currently utilizes two methods for verifying financial assurance requirements imposed on owner/operators. These are: periodic verifications performed by the Financial Assurance Section; and verification by regional office

storage tank inspectors through their standard tank inspection process. If used systematically, both methods would be effective in identifying compliance with requirements.

Financial assurance compliance rates are low. In 1997, the Commission conducted a sample verification of registered tank owners to determine if they met Commission requirements. Results indicated that 25 of 69 tank owners did not reply to the request to submit documentation and, of the 44 who did reply, 50 percent did not have appropriate financial assurance. State Auditor's Office reviews of Commission survey results identified small tank owners (who own from 1 to 13 tanks) as the group with the highest rate of financial assurance noncompliance.

Compliance rates improve when violations are issued. Regional inspection violation cases indicate that actively identifying violations provides the regulated community with an incentive to comply. Audit tests conducted by the State Auditor's Office in three regional offices revealed that tank owners tended to obtain required coverage after the Commission issued a Notice of Violation (NOV). Eighty-six out of 110 violations (78 percent) identified at the three regional offices confirmed instances in which financial assurance coverage did not exist. Of those violations, 31 percent obtained the necessary coverage as the result of an NOV.

Unresolved violations should be referred to the Enforcement Division. Limited tests conducted at three regional offices indicated that the Commission did not always follow up on unresolved violations in a timely fashion. Currently, tank owners have 30 days from the receipt of an NOV to comply. State Auditor's Office audit tests conducted in the three regions revealed that 19 of the 86 files (22 percent) for which an NOV was issued had passed the deadline for response, with no follow-up action or referral to the Enforcement Division. Some of these violations were up to 10 months old and still had not been referred to the Enforcement Division.

Enforcement efforts are critical because without the threat of penalties, the regulated community will not be compelled to comply with requirements. If active follow-up and enforcement measures are not taken at the time violations are discovered, the sites might develop leaks in the future, leaving the State liable for cleanup costs.

The Commission has plans to verify financial assurance documents for selected tank owners in spring 2001.

The Commission does not have the authority to assess criminal penalties for violations. The Commission can bring criminal charges against and shut down facilities that fail to make the required technical upgrades to petroleum storage tanks. However, the Commission does not have the authority to bring criminal charges against tank owner/operators that knowingly violate Commission financial assurance requirements.

Texas House Bill 2587, 74th Legislature, Regular Session (1995), required owner/operators to secure financial assurance. One intent of the bill was to eventually phase out the PSTR fund. A subsection of House Bill 2587 provided for criminal prosecution if a tank owner operated without the appropriate financial assurance.

However, the Texas Water Code² does not contain any provision for criminal prosecution of tank owners that operate without financial assurance.

Recommendations:

- Improve methods for verifying that the regulated community has the appropriate level and type of financial assurance to comply with Commission rules. Consider using a risk-based approach that includes targeting those in the regulated community at highest risk of noncompliance, such as small tank owners and owner/operators that have reported leaks not eligible for reimbursement from the PSTR Fund.
- Strengthen the Commission's response to identified financial assurance violations and initiate enforcement actions for unresolved violations. Enforcement actions provide a deterrent for willful noncompliance with Commission regulations. Develop a plan for handling financial assurance violations identified by the Commission during its scheduled review of targeted tank owners in spring 2001.
- Work with the Legislature to determine if current penalties for financial assurance violations meet the Legislature's intent as written.

Management's Response:

- *Effective immediately, the TNRCC will proceed with a risk-based approach to verifying financial assurance. This effort will include:*
 1. *The Financial Assurance Unit will weight the compliance evaluations of self-certification of financial assurance toward smaller tank owner/operators.*
 2. *The Remediation Unit will work with Enforcement on a process for reviewing sites with no F.A. State Lead has already initiated Enforcement referrals on some emergency sites.*
 3. *The Field Operations Division will continue to apply risk based criteria to determine which sites to investigate.*

Based on the current inspection strategy for compliance evaluation inspections, alleged non-compliant facilities is the number one priority. See an explanation of the Field Operations Division's inspection strategy under our management response under issue 4-A.
- *The TNRCC has formulated a plan of action for handling financial assurance violations discovered during the Financial Assurance Team's (Revenue Section of the Financial Administration Division) review of self-certification*

² Texas Water Code, Subchapter F (Criminal Prosecution), was unintentionally repealed in 1997 (Act of September 1, 1997; 75th Legislature, Regular Session, Chapter 1072).

forms beginning in the spring 2001. If financial assurance is not demonstrated in response to the compliance check letter, an NOV will be sent to the responsible party (RP), allowing 30 days for the RP to submit appropriate documentation of financial assurance. Failure to demonstrate financial assurance during this time period will place the facilities on a list of alleged noncompliant facilities, which will be forwarded to FOD for additional investigation. If additional violations are discovered, the Region will initiate enforcement action. If financial assurance is the only violation, the Financial Assurance Unit will prepare a referral for the Enforcement Division to initiate enforcement.

The Enforcement and Field Operations Divisions of OCE both have written Standard Operating Procedures. These documents were created in an effort to provide detailed policies and procedures to OCE staff with regard to investigation and enforcement activities and in an effort to ensure consistency throughout the 16 regional offices of FOD. The TNRCC's Office of Compliance and Enforcement is committed to following the guidelines set forth in the document entitled "Enforcement Initiation Criteria". This document outlines the time frames for all categories of alleged violations, including Financial Assurance violations.

- *The TNRCC is working with the Legislature during the current session to determine if current penalties for financial assurance violations meet the legislature's intent as written.*

Section 5-B:

Standardize Regional Office Inspections for Financial Assurance Documentation

The Commission lacks a consistent approach to regional office inspections of financial assurance documentation. Limited State Auditor's Office audit tests conducted at three regional offices revealed that:

- Regional inspectors accept inappropriate proof of tank owner financial assurance. Inspectors in regional offices accept different kinds of documents as proof that tank owners possess adequate financial assurance. Some of the documents currently used as proof include insurance binder policies, bids and quotes, policies with no effective dates, or policies with missing information. Audit tests also revealed that some inspectors closed financial assurance violations based on these documents. Fifteen percent of 86 violations tested were inappropriately resolved and closed based upon binder policies, bids, and quotes.

Policy bids and quotes should not be considered as proof of coverage because they do not show that the tank owner ever acquired financial assurance coverage. Policies not containing policy effective dates or other basic information do not provide confidence that the policy is adequate or meets Commission requirements.

The Commission's petroleum storage tank investigation manual states that, if a tank owner/operator uses an insurance policy as a method of coverage, the investigator should request an insurance certificate in order to evaluate the policy's compliance with agency regulations.

- Regional inspectors do not always document how financial assurance violations are resolved. Regional case files do not always contain proof of financial assurance. Sixteen percent of the 86 case files tested did not contain the required documentation needed to close the file. In some cases, inspectors documented compliance by indicating compliance only on the compliance checklist. Although some inspectors requested that tank owners submit the required documentation for inclusion in the case file, in other cases, a policy was not submitted and team leaders closed the file, without reviewing the necessary documents. The petroleum storage tank investigation manual states that copies of insurance policies should be included in the investigation report.

Recommendation:

Have Commission regional offices enforce existing policies and procedures, and have regional inspectors follow the procedures and requirements specified in the petroleum storage tank investigation manual. If regional inspectors follow the manual's guidelines, existing inconsistencies will be eliminated and regional inspectors will accept only appropriate documentation.

Management's Response:

The TNRCC will recommunicate the procedures and requirements specified in the PST Investigation Manual. This will occur by February 28, 2001. Furthermore, during our routine monitoring in the regional offices, we will stress that regional inspectors follow the manual's guidelines and use only the current forms. This is an ongoing action that will begin by March 30, 2001.

Section 6:

Develop a Comprehensive Plan and Strategies for Implementing the New Self-Certification Program

The Commission has made some progress in implementing the new Self-Certification Program. However, the Commission should further refine its plan and strategies in order to determine the program's overall effectiveness in meeting its goals and objectives. The program's primary goal is to ensure that registered tank owner/operators are in compliance with all of the Commission's technical upgrade and financial assurance requirements. Under the new program, tank owner/operators will be required to certify annually that tanks meet Commission requirements.

Technical requirements include spill and overfill protection, corrosion protection, and leak detection.

Enabling legislation for the Self-Certification Program became effective on September 1, 1999. The development and adoption of Commission rules for the program took over 14 months, with the Commission approving the rules on November 1, 2000. Commission management has not fully developed an action plan or strategies for program implementation, which would determine submission deadlines, describe agency program responsibilities, and outline future actions.

The Commission's lack of a clear strategy, coupled with poor communication between Commission division staff members, has limited staff's understanding of program implementation, goals, objectives, and strategies. While most division staff members have an understanding of their unit's role in the program, they lack a clear vision of other division roles and how divisions will interact with each other.

The Commission has not addressed how the program will be implemented or managed across functional areas. Some potential problems are:

- Violation Tracking - The Registration, Reporting, and Evaluation Division is responsible for submitting the names of tank owner/operators that fail to submit self-certification forms to the Field Operations Division. However, it isn't clear how the Commission will continue to track owner/operators that fail to submit the required self-certification forms.
- Facilities Inspection - It is possible the Commission's regional offices, which are under the direction of the Field Operations Division, will see an overall increase in their inspection workload once they begin conducting inspections for self-certification violations. Regional office staff members are concerned that, if inspections increase, they will not have adequate resources to follow up on reported violations in a timely manner.
- Enforcement Actions - The Enforcement Division's role in the Self-Certification Program will be to pursue tank owners not in compliance with the Commission's self-certification rules. The Commission has not developed a strategy for taking enforcement action.
- Informational Database - The Commission is currently developing a new database for the Self-Certification Program. The database will be separate from the Commission's Texas Regulatory Auditing and Compliance System database, which maintains current records on all registered tank owner/operators. Work continues on the new self-certification database; the Commission is testing it to ensure that it performs as intended. It is not clear how the two databases will interact to accommodate the needs of the program.

Recommendation:

Develop a comprehensive action plan and strategies that define how the Commission will implement and manage the Self-Certification Program. The plan should include, but not be limited to, the following elements:

- Resources to use
- Methods, processes, and procedures to employ
- Tasks to perform
- Sequence of steps to follow
- Individual and division responsibilities for all components of plan implementation
- Deadlines, timetables, and schedules
- Milestone checkpoints
- Performance measures to gauge progress and verify goal attainment

Management's Response:

This recommendation has been implemented by developing a comprehensive plan for the implementation of the new self-certification program. This plan was developed with the associated divisions/program areas within the agency. Further, this information has been shared with the regulated community.

Section 7:

Issues for Further Study

Section 7-A:

Environmental Liability Insurance

The adequacy of commercial insurance to satisfy financial assurance requirements might be problematic in the future for sites with pre-existing conditions. Some insurance providers do not inspect routinely the sites covered by insurance, nor do they always check the status or condition of petroleum storage tanks before issuing policies. In other cases, tank owner/operators inadvertently may provide incomplete or inaccurate information about tanks or tank conditions.

As a result, insurance companies may dispute claims in cases for which sites have had previously identified leaks, even if the leak is on a tank that had not leaked previously. In such cases, it is possible that insurance companies may deny coverage for the new leak, because they would not be able to determine whether damage was caused by the old leak or the new one. While insurance companies may continue to issue such

policies, there is a good chance they will challenge whatever claims materialize after policy issuance.

Another problem that exists is that companies that underwrite storage tank insurance policies are not licensed or regulated by the state and a standard policy does not exist, as is the case for automobile insurance. The Department of Insurance directly regulates carriers of automobile insurance. It also mandates the use of a standard form or contract for automobiles. It does not mandate policy standards for companies that issue storage tank liability insurance, which is written for "excess and surplus lines." By law, surplus line carrier rates and policy language are not subject to Department of Insurance review or to most Texas insurance laws. This gives surplus line carriers maximum flexibility to provide a market for unusual, large, or hard-to-place risks. However, it creates possible inequities in insurance coverage and could make it difficult for tank owners to find suitable insurance that will meet all Commission requirements.

Development of a standard tank liability insurance policy may be instrumental in preventing or reducing disputed coverage claims involving future tank leaks. The Commission is encouraged to monitor the potential problems associated with current insurance policy issues, and take the necessary steps to address them should adverse trends develop.

Section 7-B:

National Laboratory Accreditation

The Commission should consider requiring all laboratories that submit scientific data to adopt nationally accredited laboratory standards. While the Commission does not have the regulatory authority to create a state accreditation standard, it can impose rules requiring the laboratories it uses to adhere to a national laboratory protocol. Such a requirement could enhance confidence in laboratory data used to monitor cleanup progress and ensure appropriate site closures.

The National Environmental Laboratory Accreditation Conference (NELAC) is a voluntary association of state and federal agencies (primarily the U.S. Environmental Protection Agency) whose primary purpose is to establish and promote mutually acceptable performance standards for the operation of environmental laboratories. The goal of the conference is to foster the generation of environmental laboratory data of known quality on which to base public health and environmental management decisions.

If the Commission lacks adequate resources to require laboratories to adhere to a national accreditation standard, then it should consider maximizing the use of its Laboratory Quality Assurance Assessment Program. When requested by Petroleum Storage Tank program staff, the Commission's in-house inspection program performs quality assurance and quality control inspections of laboratories. The Commission estimates that approximately 1300 to 1400 laboratories in Texas perform analyses for various state regulatory programs. In fiscal year 2000, only 31 labs were actually

inspected through the program. This might be because of the small size of the current laboratory assessment program.

Environmental lab testing and data analysis are critical to effective environmental regulation. To better protect the public, the Commission should take additional steps to ensure laboratory testing methods and reporting procedures are reliable and accurate.

Management's Response

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

February 1, 2001

Mr. Lawrence F. Alwin, CPA
State Auditor
State Auditor's Office
Robert E. Johnson, Sr. Building
1501 North Congress Avenue
Austin, TX 78701

Dear Mr. Alwin:

Thank you for the assistance provided by your office through the audit of the Texas Natural Resource Conservation Commission (TNRCC) Petroleum Storage Tank (PST) Program. The information provided through the work of your staff has been very helpful.

Attached are responses to your recommendations. Overall, the TNRCC concurs with the recommendations in this report. However, there are several recommendations that will require additional staff resources to implement. Furthermore, we agree with the State Auditor's Office's (SAO) basic method of projecting the financial resources needed to continue the program. However, we believe the SAO's projection is low due to applying a discount on in-house claims in order to calculate their estimate. Further, neither the SAO's nor the TNRCC's projections factor in the costs of remediating methyl tertiary butyl ether (MTBE) contaminated sites. Should we be directed to remediate MTBE contamination, we estimate that cleaning up MTBE contaminated sites could increase costs by 40% in the assessment and remediation phases of corrective action.

Due to the many uncertainties related to predicting the future resources needed, we request that the SAO conduct a followup review of the projections at some point in the future.

Once again, we appreciate the assistance provided by your office. In particular, we are grateful for the professionalism of the project team assigned. If you need additional information, please contact me at 239-3900.

Sincerely,


Jeffrey A. Saitas, P.E.
Executive Director

Enclosure

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Objective, Scope, and Methodology

Objective

The objective of this audit was to evaluate the general condition and effectiveness of the Petroleum Storage Tank (PST) Program at the Natural Resource Commission. The evaluation included a review of the claims reimbursement process; registration activities; regional office PST inspections; technical review, inspection, and monitoring of PST clean up efforts; and program financial projections.

The audit team analyzed the following specific areas related to the overall audit objective:

- Commission efforts to analyze current and future resource needs for the PST Program
- Whether the Commission effectively evaluates cleanup and site closure activities
- Whether the Commission's Self-Certification Program will minimize future liability to the State

Due to the technical nature of the PST Program, audit analysis focused on the Program's system of internal controls. These controls are policies, procedures, and processes used to carry out an organization's objectives. They should provide reasonable assurance that:

- Program goals are met.
- Assets are safeguarded and used efficiently.
- Reliable information needed by executive management is gathered, analyzed, and conveyed accurately.
- Proper steps are taken to ensure that the program will function in the future.

Internal controls can only provide reasonable assurance that objectives will be achieved. However, monitoring established controls can assist in detecting and correcting weaknesses in a timely manner.

Scope

The scope of this audit included consideration of past and current legislation, audits and special studies, and Commission control systems. The Commission's analysis of future program needs was evaluated, and the following topics were considered:

- Management policies and procedures for projecting the financial resource needs of the program
- Processes for identifying, collecting, classifying, evaluating, maintaining, and updating information
- The availability, timeliness, accuracy, and communication of information needed to support the PST Program's mission, goals, and objectives
- Processes used to select, hire, and train PST Program employees
- Processes used to identify, collect, and report revenue
- Processes in place to ensure that PST Program funds used for reimbursing PST owner/operators for site clean-ups are protected against waste and abuse

Methodology

Information collected to accomplish the audit objectives included the following:

- Interviews with case coordinators, team leaders, program managers, program directors, executive management, and regional office staff
- Interview with Legislative Budget Board (LBB) members
- USAS data for fiscal years 1996 through 2000
- PST Fund projections
- PST Investigation Manual
- PST compliance inspection checklists
- State-lead application packets
- PST expenditure and encumbrance data for fiscal years 1990 through 2000
- Responsible Party Remediation Section caseload data
- Quality Assurance Laboratory Assessment Program inspection records for fiscal year 2000
- Compliance and Evaluation Section audits
- Information contained on the Commission's website
- Sunset Commission Advisory Report
- Stakeholder interviews
- Human resource policies

- Internal audit reports
- State Auditor's Office CAFÉ (Comprehensive Analysis for Efficiency) summary diagnostic reports
- Commission legislative appropriations requests
- Commission Self-Evaluation Report
- Reimbursement Section policies and procedures
- Financial Administration policies and procedures

Procedures and tests conducted:

- SMARTMAPS and Paradox database queries
- License Testing (Corrective Action Specialist and Corrective Action Project Manager Registrations)
- File Testing (case incident reports)

Analysis techniques used:

- Control reviews
- Trend analysis
- Data comparison

Criteria used:

- Texas Water Code
- Texas Administrative Code
- Previous internal and external audits
- Commission reporting forms
- Commission publications classified as Guidelines for the Regulated Community
- Texas House Bill 2587, 74th Legislature, Regular Session
- General Appropriations Act, 76th Legislature

We conducted fieldwork from June 2000 through November 2000. The audit was conducted in accordance with generally accepted government auditing standards.

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We appreciate the professionalism and cooperation of the Commission staff members during the course of this audit. Their assistance enabled the audit team to complete fieldwork in a timely manner.

Petroleum Storage Tank (PST) Program Background and Description

Appendix 2-A:

Background

In 1984, Congress responded to the increasing threat to groundwater posed by leaking underground storage tanks (USTs) by adding Subtitle I to the Resource Conservation and Recovery Act (RCRA). This section of the law required the U.S. Environmental Protection Agency (EPA) to develop a comprehensive regulatory program for USTs. Congress directed the EPA to publish regulations that would require owners and operators of new tanks and tanks already in the ground to prevent and detect leaks, clean up leaks, and demonstrate financial responsibility for cleaning up leaks and compensating third parties for resulting damages.

Leaking storage tanks are thought to be the source of as much as 86 percent of the groundwater contamination cases in the state. The EPA estimates that 25 percent of the underground storage tanks in the U.S. have leaked, do leak, or will leak. The migratory behavior of petroleum product releases means that slow response to reported leaks can increase the cost of corrective action, and present an imminent danger to the environment and the public's health and safety.

The PST Program, as it is known in Texas today, was created in 1989, and its statutory authority is contained in Texas Water Code, Chapter 26, Subchapter I. The statute authorizes the Commission to develop and administer a statewide regulatory program for underground and above-ground storage tanks.

The PST Program's primary goal is to protect the public and the environment by preventing releases into the environment, particularly those that affect groundwater, and to clean up sites polluted with petroleum products. The Commission's primary concern is the long-term protection of Texas ground and surface water from contamination.

The PST Program is different from the Commission's other regulatory programs because the regulated facilities are often small, but the Commission's regulated community is large.

Appendix 2-B:

Program Responsibilities

The PST Program is a complex program that reaches across many different Commission offices, divisions, and sections.

Office of Permitting, Remediation, and Registration

The Office of Permitting, Remediation and Registration provides oversight for the investigation and cleanup of hazardous pollutants released to the environment, and for the PST reimbursement program.

The divisions and sections that administer individual program elements include:

- **Remediation Division**

The Remediation Division oversees the investigation and cleanup of leaking petroleum storage tanks. Oversight programs include:

- PST Responsible Party Remediation (RPR) Program, which is responsible for the regulatory oversight of cleanups coordinated by the responsible party (owner/operators). RPR staff members record and evaluate all reported incidents of releases of petroleum and other hazardous substances from storage tanks. Because almost all corrective actions must be approved in advance to be eligible for reimbursement, staff members review proposals and supporting technical data to provide written pre-approval. Staff members administer corrective action projects from initiation through completion, and all projects are subject to final written concurrence.
- PST State-Lead Program, which receives referrals of release incident cases from either the Commission's RPR Program or the regional field offices. Referred cases generally involve responsible parties who are either financially unable or unwilling to conduct the necessary corrective action at a leaking petroleum storage tank (LPST) site. The program also receives referrals and assumes responsibility for corrective action at LPST sites where the responsible parties are unknown, and at LPST sites with multiple contamination sources. Staff project managers direct corrective action efforts at LPST sites, and contractors manage state-lead cleanup activities. Project managers evaluate and approve contractors' work plans for site-specific work orders; oversee field activities; and review and approve reports, invoices, and other contract-related submittals.

- **Registration, Review, and Reporting Division**

The Registration, Review, and Reporting Division registers underground and above-ground petroleum storage tanks and provides technical support to PST owner/operators. In addition, it is responsible for reimbursing eligible applicants for remediation of LPST sites. Sections responsible for these functions include:

- The PST Reimbursement Section, which provides reimbursement for remediation of contamination resulting from those eligible LPST sites cleaned up by responsible parties (owner/operators).
- The Registration Section, which is responsible for registration of underground storage tanks (UST) and above-ground storage tanks

(AST). The Commission tracks registered tanks in a database that includes facility, owner, and tank information supplied by the owner.

- The Technical Assistance Section, which provides technical assistance regarding the application and interpretation of UST rules, and reviews requests for variances from technical standard requirements.

Office of Compliance and Enforcement

The Office of Compliance and Enforcement oversees agency enforcement and monitoring activities, and the operations of 16 regional offices across the state. Various divisions and sections within this office perform functions that support the PST Program. They include:

- **Field Operations Division**

The Field Operations Division is responsible for overseeing and ensuring compliance with PST regulations, through the use of regional office PST inspectors.

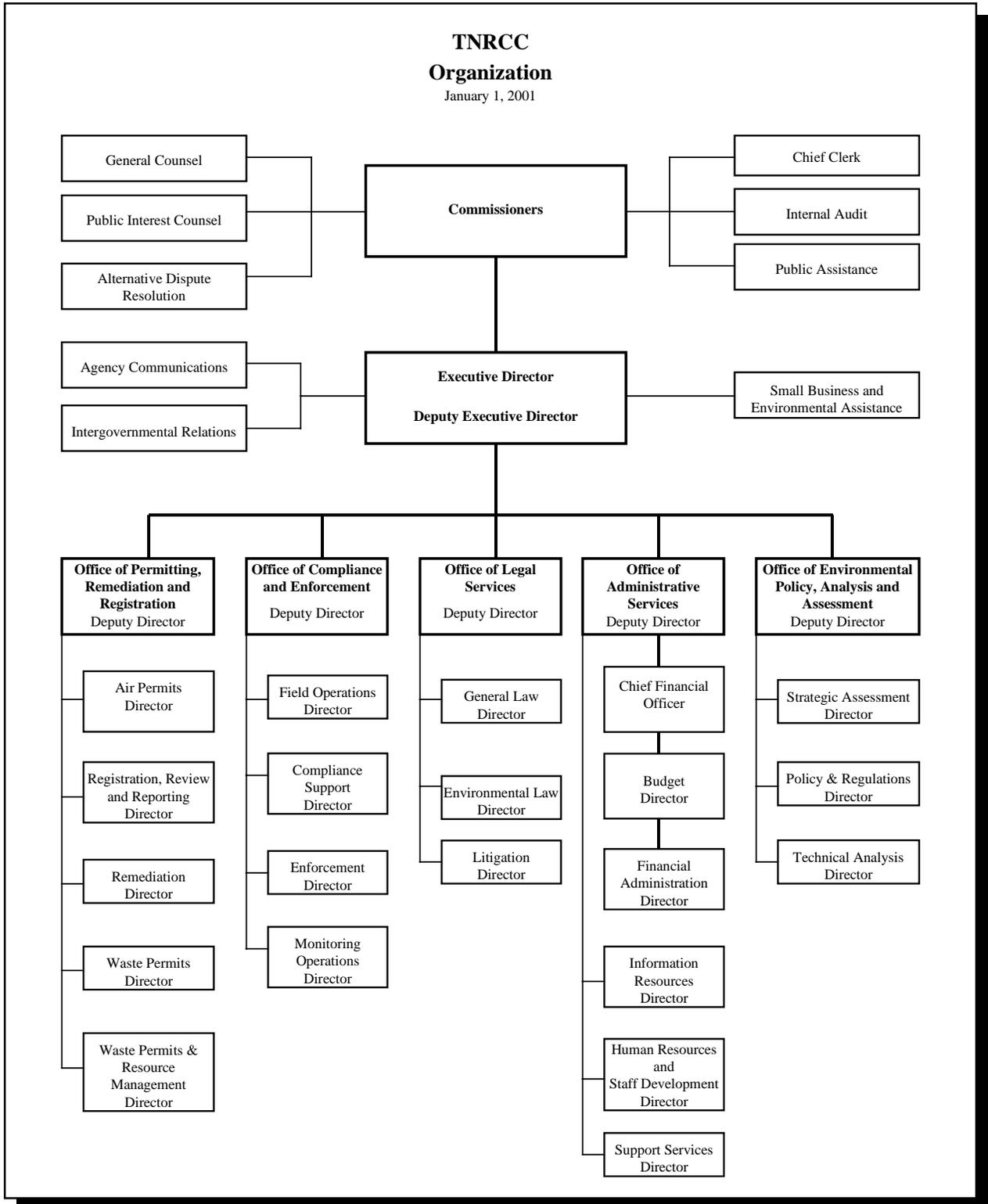
- **Compliance Support Division**

The Compliance Support Division maintains operator and installer certification records for UST installers. In addition, it administers and maintains registrations for the program's Registered Corrective Action Specialists (RCAS) and Corrective Action Project Managers (CAPM). Both special registrations are required of contractors performing work on responsible party cleanups. In addition, this division manages the quality assurance program for federally funded activities and laboratory inspections.

- **Enforcement Division**

The Enforcement Division is responsible for ensuring that violations of state environmental laws are correct. The division develops formal enforcement cases in accordance with applicable state statutes and regulations.

Organizational Chart



PSTR Fund Cost Projections

Appendix 3-A:

The Commission Model

Methodology

The Commission's method of calculating the cleanup costs for the remaining 6,947 LPSTs that are fund eligible employs a matrix that incorporates three different factors.

- LPSTs - These are the numbers of sites that have been pre-approved in the RPR database for each of the phases of cleanup.
- Costs - The costs associated with each phase of cleanup come from the RPR database and are the approximate average of amounts pre-approved for a phase.
- Percentage - This is the percentage of the LPSTs that will require work in a particular phase of cleanup. This number is estimated by RPR and the Reimbursement Division Management.

Computations in the cells of the matrix are the product of the number of LPSTs in that phase and the average cost of the phase. For LPSTs that have not yet reached a phase the product is multiplied by the percentage factor for that phase.

Phases of Cleanup

The Commission Model includes five phases of cleanup. The phases and average costs are:

- Site Assessment (\$17,595) - The initial phase after an LPST number has been assigned. The owner/operator applies for pre-approval of funds to engage a corrective action contractor to determine the extent of a leak. Sites in "pre-assessment" are sites with an LPST number that have not yet applied for pre-approval of this phase.
- Monitoring (\$15,510) - This phase is groundwater monitoring. The contractor has applied for pre-approval for a certain number of monitoring wells to be drilled and the ground water is routinely tested to determine the area and concentrations of contamination.
- Risk Assessment (\$4,000) - Pre-approval is requested for the contractor to engage in statistical projections of the levels of risk associated with various courses of action that may be taken.
- Remediation (\$200,000) - The contractor applies for pre-approval of the costs associated with the work required to bring the level of contamination down to acceptable risk levels. This phase consists of five sub-phases. The

Commission added the average of the sub-phases to arrive at one aggregate cost for remediation.

- Site Closure (\$3,500) - Pre-approval is sought for costs associated with closing a site and preparing final reports.

The State Auditor's Office revised the Commission's original projection model by breaking down the remediation phase into five separate categories. As a result of this breakdown, original Commission estimates were lowered. (See Table 4 on following page.)

Management's Response:

The Agency has projected that approximately 10 percent of the "active-eligible" sites would require some form of engineered remediation system to be installed and operated at these sites to reduce contamination encountered at the site.

While the State Auditor looked at a discrete period of time to arrive at percentage of each phase of remediation, the real objective is for each site to complete remediation and reach closure. Once a site has completed RAP feasibility and is in RAP prep, it is necessary to progress to RAP installation and O&M. For this reason we think 10 percent is more representative of future remediation needs in feasibility, preparation, installation and O&M.

Due to the many uncertainties related to predicting the future resources needed, we request the SAO conduct a follow-up review of projections at some point in the future.

Appendix 3-B:

MTBE Projections

The Commission has also projected costs for the removal of methyl tertiary butyl ether (MTBE) from affected sites by increasing the costs of the site assessment and remediation stages of cleanup by 40 percent. The State Auditor's Office has not considered the effects of cleanup for MTBE. In the past, MTBE remediation as a result of leaking storage tanks has not been a part of the Commission's cleanup strategy for the PSTR Fund and there is no agency data to evaluate its effect.

MTBE is a fuel oxygenate added to gasoline throughout the United States to reduce carbon monoxide and ozone emitted by automobiles. Releases of MTBE occur through leaking petroleum storage tanks and fuel spills. Consequences of MTBE releases include adverse water taste and odor, in addition to other health effects.³

³ MTBE in Drinking Water. Ground Water & Drinking Water. December 29, 2000. U.S. Environmental Protection Agency. <http://www.epa.gov/safewater/mtbe.html>.

Table 4

Cleanup Costs for Remaining Fund Eligible LPSTs											
	Number of LPST sites	Site Assessment	Monitoring	Risk Assessment	Remediation Phase					Closure	Total
					Phase Separated Hydrocarbons Recovery	Corrective Action Plan Feasibility	Corrective Action Plan Preparation	Corrective Action Plan Installation	Operations and Maintenance		
Percentage of sites expected to be processed in phase		95%	90%	15%	17%	7%	9%	4%	5%	100%	
Average cost per phase per active eligible sites	6947	\$ 17,595	\$ 15,510	\$ 4,000	\$ 9,592	\$ 9,369	\$ 4,724	\$ 102,347	\$ 65,454	\$ 3,500	
Sites in pre-assessment	1691	\$ 28,265,488	\$ 23,604,669	\$ 1,014,600	\$ 2,757,412	\$ 1,109,009	\$ 718,946	\$ 6,922,751	\$ 5,534,136	\$ 5,918,500	\$ 75,845,510
Sites in assessment	823	\$ 14,480,685	\$ 11,488,257	\$ 493,800	\$ 1,342,017	\$ 539,748	\$ 349,907	\$ 3,369,263	\$ 2,693,432	\$ 2,880,500	\$ 37,637,609
Sites in monitoring	2637		\$ 40,899,870	\$ 1,582,200	\$ 4,299,998	\$ 1,729,424	\$ 1,121,147	\$ 10,795,562	\$ 8,630,110	\$ 9,229,500	\$ 78,287,810
Sites in risk assessment	534			\$ 2,136,000	\$ 870,762	\$ 350,213	\$ 227,035	\$ 2,186,132	\$ 1,747,622	\$ 1,869,000	\$ 9,386,764
Sites in remediation	802				\$ 7,692,784	\$ 7,513,938	\$ 3,788,648	\$ 82,082,294	\$ 52,494,108	\$ 2,807,000	\$ 156,378,772
Sites in pre-closure	460									\$ 1,610,000	\$ 1,610,000
Total		\$ 42,746,173	\$ 75,992,796	\$ 5,226,600	\$ 16,962,972	\$ 11,242,332	\$ 6,205,683	\$ 105,356,002	\$ 71,099,408	\$ 24,314,500	\$ 359,146,465

Source: Commission Cost Projection Model developed from data in SMARTMAPS database

Future Initiatives

Pay for Performance Cleanups

States, including Texas, have traditionally employed time and materials contracts for cleanups of leaking petroleum storage tanks. These contracts include pre-approval of costs and the scope of the environmental work performed by contractors and verification of variances from corrective action plans. However, time and materials contracts do not motivate contractors to work effectively or efficiently toward the cleanup and closure of leaking sites. Instead, states compensate contractors for operating a cleanup system onsite without a clear timeframe for completion of their work. Such extended cleanup efforts increase total site cleanup costs.

The U.S. Environmental Protection Agency (EPA) has developed an innovative approach to traditional environmental cleanup called Pay-for-Performance (PFP) agreements. Pay-for-Performance consists of paying contractors a fixed price for cleanups as they attain measurable environmental goals. PFP agreements refocus staff on attainment of environmental results as opposed to auditing contractor internal costs. Such agreements allow agencies to set site-specific environmental goals and payment terms, while proactively monitoring contaminant reduction.

The EPA believes that PFP agreements have several advantages over typical time and materials agreements. They include:

- Environmental Milestones - Contractor compensation hinges on attainment of explicit and clear environmental milestones. States usually make their first payment after determining the working status of a contractor's cleanup system. Afterward, payment depends upon measurable drops in a site's contaminants.
- Cost Containment - PFP agreements contain state costs by capping the total price payable for the entire cleanup process versus individual components of a corrective action plan. The EPA estimates that PFP agreements are typically 40 to 60 percent less expensive than regular time and materials contracts. South Carolina found that PFP agreements capped leaking site cleanups at an average of \$137,000 as opposed to an average time and materials contract fixed cost of \$130,000 and an additional \$30,000 per year for cleanup.
- Market Efficiency - States typically award PFP agreements through a bidding process that spurs competition among private industry contractors, thus lowering the overall payment for a site cleanup. After an exhaustive evaluation of the technical merits and time feasibility of all proposals, the state sets the remaining lowest private sector cleanup proposal as the market value of the site cleanup.
- Increased Monitoring - Agencies take quarterly environmental samples for verification of the work submitted by contractors in addition to monitoring the site cleanup process through state installed monitoring wells and on-site

inspections. States may also conduct split samples as contractors meet interim and final environmental milestones.

- Limited State Liability - Owners and operators of leaking petroleum storage tanks are responsible for cleanup costs exceeding the state determined market value. Moreover, PFP agreements require that contractors purchase performance bonds or letters of credit for the total amount of the site's market value. Hence, if a contractor fails to meet deadlines or abandons the cleanup outright, the state receives the rights to the on-site treatment system and the letter of credit or performance bonds.
- Use of Cost Effective Technologies - PFP agreements induce contractor usage of cost efficient and effective technologies as a means to increase profits by lowering cleanup costs relative to the total capped amount of the site cleanup.
- Timely Cleanups - States contract PFP cleanups to end in three to five years as opposed to the indefinite closure date of time and materials contracts.

Conclusion

Pay-for-Performance agreements allow market forces to determine environmental cleanup costs through a bidding process. These agreements place a cap on the total amount payable to contractors for cleanups, thus challenging contractors to lower costs and time associated with cleanups in an effort to increase their profits. Furthermore, eliminating the State's involvement in the contractor's cleanup operations allows agency staff to concentrate on the environmental goals of the cleanups as opposed to the costs associated with the contractor's work. Consequently, there is an increase in on-site inspection and monitoring efforts.

Nationally there is a movement towards implementation of Pay-for-Performance agreements. Currently South Carolina, Oklahoma, and Florida boast the most successful Pay-for-Performance programs in the nation. As of fiscal year 1999, there were a total of 12 states involved in the EPA's PFP program and, by the end of 2000, an estimated 18 to 21 states would have participated. Moreover, the program received the support of the National Governors Association. Additionally, the EPA's Office of Underground Storage Tanks has a new director interested in expanding voluntary state participation and possibly mandating conversion from traditional time and materials contracts to pay-for-performance agreements.

The state's mission of protecting Texans from groundwater contamination and subsequent health consequences may benefit from Pay-for-Performance's expedited leaking site cleanups and closures, while containing total costs to taxpayers.

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