

Sunset Advisory Commission



Railroad Commission of Texas



Staff Report

2000

SUNSET ADVISORY COMMISSION

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In 1977, the Texas Legislature created the Sunset Advisory Commission to identify and eliminate waste, duplication, and inefficiency in government agencies. The 10-member Commission is a legislative body that reviews the policies and programs of more than 150 government agencies every 12 years. The Commission questions the need for each agency, looks for potential duplication of other public services or programs, and considers new and innovative changes to improve each agency's operations and activities. The Commission seeks public input through hearings on every agency under Sunset review and recommends actions on each agency to the full Legislature. In most cases, agencies under Sunset review are automatically abolished unless legislation is enacted to continue them. This report is the Commission staff's recommendations, which serves as the starting point for the Commission's deliberations.

RAILROAD COMMISSION OF TEXAS

SUNSET STAFF REPORT

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SUMMARY

Summary

Overview

The Railroad Commission of Texas' mission — to protect the state's natural resources, the environment, and public safety through the regulation of the oil and natural gas industry, pipeline transporters, natural gas utilities, rail safety, and surface mining operations — is important to the State. As the oil and gas industry matures, the Commission's role in protecting the environment through plugging abandoned wells and cleaning oil field sites becomes more important. The changing nature of the oil and gas business in Texas contributes to the likelihood that, with the decline in oil production, more abandoned wells and oil field sites will need to be plugged or remediated in the future.

The Sunset review determined that current state law does not effectively ensure the financial assurance of oil and gas operators and producers, potentially leaving the State liable for pollution and abandoned wells. In addition, the Commission is limited in its ability to plug abandoned wells and clean oil field sites because revenue going to the Oil Field Cleanup Fund is capped. The recommendations in this report suggest a two-pronged approach to address the problem of abandoned wells by attempting to stop the creation of new abandoned wells, and identifying a strategy to devote more resources to deal with the existing abandoned well inventory. The report also includes strategies to encourage private efforts to clean existing abandoned sites. Other issues in this report seek to clarify the standards for remediation efforts in the state and enhance pipeline safety regulation by focusing oversight on pipeline integrity, as opposed to operational characteristics.

The Commission is currently working to address many of the issue areas discussed in the report and, in several cases, has already adopted rules to begin to address the problems identified. As a result, the recommendations in this report serve to clarify the Commission's authority related to those actions and provide an adequate statutory framework for future actions.

Combined, the recommendations in this report are designed to ensure entities regulated by the Commission take a more active role in protecting the environment and public safety. The structure of the Commission's regulatory processes also plays a key role in achieving this objective. Although opportunities exist to consolidate or transfer some Commission's functions to other agencies, each of these options has drawbacks. As a result, the agency and its programs continue to perform essential functions and should be continued. A summary of the key recommendations and findings for each issue identified in this report is outlined below.

Issues / Recommendations

Issue 1 The Structure of the Oil Field Cleanup Fund is Insufficient to Meet the State's Current and Anticipated Liability.

Key Recommendations

- Require the Commission, through the Legislative Appropriations Request process, to establish specific performance goals for the Oil Field Cleanup Fund.
 - Require the Commission to set fee amounts at a level necessary to support the performance goals for activities supported by the Oil Field Cleanup Fund.
 - Require the Commission to maintain detailed expenditure reports for the Oil Field Cleanup Fund, and make those reports available to the public.
 - Require the Commission to explore a range of improved business practices to expand well plugging efforts.
-

Issue 2 Without Adequate Financial Assurance and Enforcement, the State Will Continue to be Burdened with Abandoned Wells.

Key Recommendations

- Phase in universal bonding of oil and gas operators by September 1, 2003.
 - Enhance information included on permit applications.
 - The Railroad Commission should ensure that ineligible operators are denied drilling permits, and that responsible parties are held accountable for violations.
-

Issue 3 Landowners and Developers Do Not Have Sufficient Incentive to Clean Up Contaminated Oil Field Sites.

Key Recommendation

- Authorize the Commission to create a voluntary cleanup program, separate from the operator cleanup program, which allows landowners and developers to be statutorily released from liability for future cleanup costs.

Issue 4 The Commission's Site Remediation Efforts Lack Clear Risk Assessment Standards and Miss Opportunities for Pollution Prevention.

Key Recommendations

- Require the Commission, by rule, to establish a risk-based assessment to guide site remediation efforts.
 - Require the Commission to prioritize high-risk abandoned wells under its jurisdiction for annual tests.
-

Issue 5 State Regulation of Pipelines Does Not Adequately Protect the Public.

Key Recommendations

- Require the Commission to develop a framework to guide decisions on bringing pipelines outside of its jurisdiction under regulation.
 - Authorize the Commission to require a pipeline operator to submit an assessment or testing plan for Commission approval.
 - The Commission should create an enforcement coordinating function within the Pipeline Safety Section.
-

Issue 6 Enforcement of Aggregate Quarry and Pit Safety is Not Consistent with the Mission of the Railroad Commission.

Key Recommendations

- Transfer responsibility for administering the Aggregate Quarry and Pit Safety Act to the Texas Department of Transportation.
 - Clarify that the Act applies to all pits and quarries, not just those associated with a processing plant.
-

Issue 7 Texas Has a Continuing Need for the Railroad Commission.

Key Recommendation

- Continue the Railroad Commission of Texas for 12 years.

Fiscal Implication Summary

This report contains several recommendations that will have a fiscal impact to the State. They are discussed below.

- Issue 1 - Setting fees in amounts adequate to fund increased oil field cleanup performance goals will result in revenue gain to the Oil Field Cleanup Fund. Sunset staff is unable to estimate the total gain in revenue, since performance goals and corresponding fee amounts have yet to be set.
- Issue 2 - Repealing the \$100 per year “good guy option” for financial assurance would have a negative fiscal impact of approximately \$700,000 annually to the Oil Field Cleanup Fund. This loss would be primarily offset by the increased revenue generated from the recommendations included in Issue 1.
- Issue 3 - Creating a voluntary cleanup program will require the Commission to hire staff to oversee and monitor voluntary cleanups. The actual cost will depend on how many landowners choose to participate in the program. These costs would be funded through the Oil Field Cleanup Fund.
- Issue 4 - Requiring the Commission to annually test certain abandoned wells could be a cost to the State depending on the number of wells that may require testing. The annual cost would range from \$150 to \$1,000 per well, depending on the type of test required. These costs would be funded through the Oil Field Cleanup Fund.
- Issue 5 - Establishing an enforcement coordinator to assist in pipeline regulations could have additional costs if the Commission seeks an additional position to fulfill this purpose.
- Issue 6 - Transferring responsibility for enforcement of the Aggregate Quarry and Pit Safety Act will require the transfer of existing resources from the Commission to the Texas Department of Transportation, but will not have a net fiscal impact to the State.

ISSUES / RECOMMENDATIONS

Issue 1

The Structure of the Oil Field Cleanup Fund is Insufficient to Meet the State's Current and Anticipated Liability.

Summary

Key Recommendations

- Require the Commission, through the Legislative Appropriations Request process, to establish specific performance goals for the Oil Field Cleanup Fund.
- Require the Commission to set fee amounts at a level necessary to support the performance goals for activities supported by the Oil Field Cleanup Fund.
- Require the Commission to maintain detailed expenditure reports for the Oil Field Cleanup Fund, and make those reports available to the public.
- Require the Commission to explore a range of improved business practices to expand well plugging efforts.

Key Findings

- The State has a significant inventory of abandoned wells and sites needing cleanup.
- The current funding structure does not allow the State to adequately address its current and future oil field pollution liability.
- Improved business practices and documentation of Fund activities would increase performance and industry acceptance.

Conclusion

The current funding structure of the Oil Field Cleanup Fund is insufficient to meet the State's current and anticipated obligations with regard to abandoned wells and oil field sites. Through a revised goal-setting process and fee structure, the Commission can more aggressively deal with this problem. The recommendation to allow better documentation of and access to expenditure information will help ensure industry fees are appropriately used for plugging and cleanup. The recommendation on alternative options for well plugging contracts could save both the Commission and contractors time and effort and reduce administrative costs. With recommendations in Issue 2, to improve operator financial security requirements to reduce the burden to the State from abandoned wells and sites, these changes will better prepare the State to deal with those wells and sites that ultimately become its responsibility.

Support

Current Situation: The Oil Field Cleanup Fund is used to address pollution and the threat of pollution from oil and gas exploration and production.

- In 1991, the Legislature established a Fund to provide resources for well plugging and cleanup of abandoned pollution sites, such as pits, tanks, and oil waste reclamation plants. Revenue for the Fund comes from the oil and gas industry, with the major sources coming from oil and gas drilling, application, and production fees. The majority of these fee amounts are set in statute. All funding sources are shown in the chart, *Oil Field Cleanup Fund Revenues – Fiscal Year 1999*.

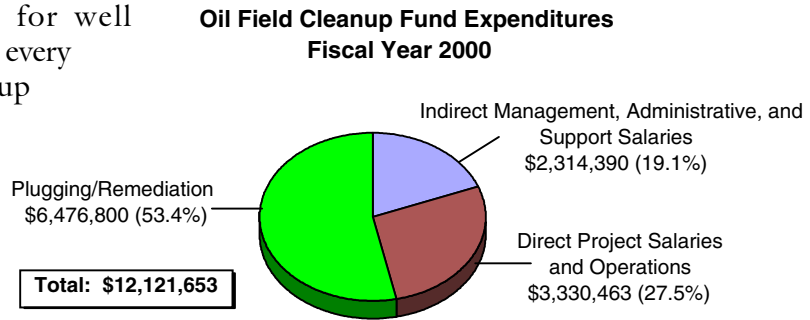
Drilling Permit Fees	\$3,749,978
Application Fees	\$1,750,654
Production Fee - Oil	1,438,647
Production Fee - Gas	\$1,425,850
Abandoned Site Equipment	\$261,906
Enforcement Penalties	\$609,240
Interest	\$343,590
Compliance Certification Fees	\$288,581
Other	<u>\$536,163</u>
Total	\$10,404,609

- The Commission has historically received between \$10 and \$13 million a year from the Oil Field Cleanup Fund, comprising about 25 percent of the agency’s operating budget. Through fiscal year 1999, this revenue allowed the Commission to plug 11,091 abandoned wells and clean up 1,309 polluted sites, or an average of nearly 1,400 wells and 175 sites per year. The Commission contracts for this cleanup activity, principally on a multi-well or per-site basis. Fund revenue and oil field cleanup activities for each of these fiscal years is shown in the chart, *Analysis of the Oil Field Cleanup Fund – Fiscal Year 1992 - 1999*.

Fiscal Year	Revenue	Number of Wells Plugged	Number of Sites Clean Up
1992	\$9,203,344	1,324	53
1993	\$11,045,046	1,404	79
1994	\$12,590,771	1,326	93
1995	\$13,448,798	1,364	144
1996	\$12,213,843	1,366	155
1997	\$13,073,054	1,577	213
1998	\$12,858,418	1,604	281
1999	\$10,404,609	1,126	291

Revenue for the Cleanup Fund comes mainly from oil and gas industry fees.

- The Commission contracts for well plugging and site cleanup. Not every dollar in the Oil Field Cleanup Fund is spent on actual “in-the-field” plugging and remediation activity. The law also allows the Commission to use the Fund for site investigations, environmental assessment, enforcement activities, and reporting. Therefore, a portion of the Fund goes toward staff salaries and other support functions that ultimately support oil field cleanup. The chart, *Oil Field Cleanup Fund Expenditures – Fiscal Year 2000*, shows the Commission’s breakdown of expenditures for the most recent fiscal year.



Problem: The State has a significant inventory of abandoned wells and sites needing cleanup.

- The Commission has cataloged approximately 24,000 non-compliant wells in Texas, of which at least 17,000 wells are abandoned, and under its sole jurisdiction. However, Railroad Commission staff acknowledge that the actual number is probably much greater due to the large numbers of wells that were abandoned before reporting was required. Based on this larger inventory, on which little data is currently available, Commission staff estimate the actual number of wells in need of state-funded plugging to be approximately 200,000.

At its current pace of plugging almost 1,400 wells per year, the Commission would need another twelve years to plug the abandoned wells it is responsible for today. At an average of \$4,500 per well, it would need \$76.5 million to plug all the state’s currently identified orphaned wells. However, these figures do not take into account any additional abandoned wells that the State may ultimately inherit.

- Site cleanup poses an even greater challenge. The Commission currently has an inventory of 1,857 abandoned sites. These sites range from small spills costing less than \$2,000 to remediate, to groundwater contamination costing more than \$100,000 to clean up. In fiscal year 2000, the average cost of cleaning up an abandoned site was \$9,408. The Commission estimates that eventually site remediation costs will overtake plugging costs, but the costs associated with cleaning these sites up are difficult to estimate.

At its current pace,
the Commission
would need another
12 years and \$76.5
million to plug the
currently known
orphaned wells.

Current funding levels allow the Commission to plug about 1,400 wells a year, even though it has the ability to plug about 1,800 wells.

Problem: The current funding structure does not allow the State to adequately address its current and future oil field pollution liability.

- The statute caps the amount of revenue that flows to the Fund. The Commission is currently collecting fees at the statutory maximum, with no flexibility to increase fee levels. In addition, by statute, regulatory fee collections must be curtailed when the Fund balance reaches \$10 million. These factors limit the number of wells the Commission can plug and the number of sites it can remediate each year.¹ Current funding levels only allow the Commission to plug about 1,400 wells per year when the Commission estimates it has the administrative capacity to plug up to 1,800 wells per year.
- The inflexible funding structure does not allow the Commission to account for variations in program requirements. For example, the current inventory of wells in need of state plugging includes many deep wells that are often costlier to plug than those wells the Commission has historically targeted.

In addition, since the Fund is supported by fees from industry, revenues decline during periods of suppressed energy prices even though the need for state-funded plugging and cleanup is greatest during these periods. For example, in fiscal year 1999 when oil and gas prices were at near-record lows, Fund revenue dropped by nearly 20 percent from the previous year, causing a significant decrease in the amount of wells the Commission was able to plug that year.

- The current funding structure acts as a disincentive for the Commission to find new abandoned wells. Since the annual Fund balance is effectively capped and a backlog of unplugged wells exists, the Commission has no incentive to approve and schedule additional wells for plugging. Similarly, the Commission is selective in targeting the most complex remediation sites since higher cost projects deplete the Fund more quickly, leaving less money for other projects.

Opportunity: Improved business practices and documentation of Fund activities would increase performance and industry acceptance.

- An industry concern is the percentage of oil field cleanup dollars spent on Commission salaries and other activities that directly and indirectly support well plugging and site remediation efforts. The Commission uses money in the Fund not only for “in-the-field” plugging and remediation, but also for core regulatory activities such as permitting and enforcement. The oil and gas industry has

shown a willingness to support additional plugging and cleanup efforts as long as it is provided adequate assurance that funds are being used to meet specific well plugging and site remediation goals.

- Individually bidding out each well plugging is administratively inefficient and can delay timely plugging of wells. To meet the need to plug more wells more efficiently, the Commission developed an extended service contract with the help of the General Services Commission in 1997. This contract allows the State to plug multiple wells under one contract, rather than bidding out plugging contracts on a well-by-well basis. By more aggressively using the extended service contract, the Commission estimates it could plug approximately 1,800 wells per year, up from the nearly 1,400 wells per year it has averaged since 1991.
- Larger contracts can pose challenges for potential bidders. Many bidders lack the expertise to comply with state procurement rules, which they were not required to comply with under previous smaller contracts. To help bidders comply with these requirements, Commission staff have held informal workshops in San Antonio and Kilgore.
- The Commission's requirement that a field inspector witness every well plugging until completion is another factor limiting the number of wells it can plug. While this practice ensures that the job is done correctly, it does not account for the risk associated with a particular job, increases oil field cleanup funds spent on administration, and pulls limited field staff away from other enforcement activities.

The oil and gas industry is willing to support additional plugging and cleanup efforts.

Recommendation

Change in Statute

- 1.1 Require the Commission, through the Legislative Appropriations Request process, to re-establish specific performance goals for the Oil Field Cleanup Fund.**
- 1.2 Require the Commission to set fee amounts at a level necessary to support the performance goals for activities supported by the Oil Field Cleanup Fund.**

These recommendations would require the Commission to work with the Legislative Budget Board each biennium to determine appropriate goals for well plugging and site remediation. This recommendation would require the repeal of the statutory cap on the Fund and specific fee amounts in statute, and require the Commission to adopt a revised fee structure each biennium to meet new performance goals.

The new performance goals should be phased-in over time. As an example, Railroad Commission staff has indicated the performance goals shown in the chart, *State Funded Plugging and Cleanup Projections – Fiscal Year 2002 - 2005*, could provide a reasonable basis for discussion. The availability of well pluggers and state procurement requirements are two factors that affect the number of well pluggings the Commission can reasonably achieve. Site remediation efforts are measured in dollars, rather than the number of sites cleaned up, due to wide range of sites and the difficulty in accurately forecasting potential cleanup costs. In setting these fee levels, the Commission should consider the need to make up revenue lost by repealing the “good guy option” for financial assurance (Issue 2), revenue needed for more oversight of voluntary cleanups (Issue 3), and revenue needed for integrity testing of wells (Issue 4). The Commission may also consider opportunities to generate additional resources for oversight of operator-funded cleanups.

State Funded Plugging and Cleanup Projections Fiscal Year 2002 - 2005		
Fiscal Year	Well Pluggings	Site Remediation
2002	1,400	\$2.2 million
2003	1,600	\$3 million
2004	1,800	\$4 million
2005	1,800	\$5 million

1.3 Require the Commission to maintain detailed expenditure reports for the Oil Field Cleanup Fund, and make those reports available to the public.

This recommendation would require the Commission to include, as part of the Fund’s annual report, a detailed explanation on how it spends money from the Fund, including a detailed accounting of Fund expenditures for cleanup activities, including contract amounts, and wells and sites cleaned up, broken out by region. The report should also included a detailed accounting of the agency’s expenditures, including amounts for staff salaries and other administrative expenses.

Management Action

1.4 The Commission should explore a range of improved business practices to expand well plugging efforts.

To meet increased performance goals, the Commission should continue its current efforts to plug as many wells as possible under any one contract. Further, the Commission should expand its efforts to provide technical guidance to bidders to help them comply with state procurement requirements. Finally, the Commission should consider a risk-based approach to the use of field inspectors to witness well pluggings, balancing the need for oversight and accountability with the need to meet increased performance goals.

Impact

The current funding structure of the Oil Field Cleanup Fund is insufficient to meet the State’s current and anticipated obligations. Through a revised goal-setting process and fee structure, the Commission can more aggressively deal with this problem, and gain the flexibility to address the fluctuations in the oil and gas industry, and recent changes in financial security requirements. Headed by three, statewide elected officials, the Commission is uniquely qualified to assume this flexibility, with accountability that most other executive agencies lack.

The recommendation to allow better documentation of and access to expenditure information will help ensure industry fees are appropriately used for plugging and cleanup, with an appropriate level of administrative expenses. The recommendation on alternative options for well plugging contracts will save both the Commission and contractor time and effort and reduce administrative costs.

Fiscal Implication

The recommendation to set fees in amounts adequate to fund increased oil field cleanup performance goals will result in revenue gains to the Oil Field Cleanup Fund (Fund 0145). Sunset staff is unable to estimate the total gain in revenue, since performance goals, and corresponding fee amounts, have yet to be set. As an example, instituting a sliding scale fee of \$250 - \$1,000 for filing an organization report before beginning operations would raise an estimated \$2.5 million a year, and increasing new permit fees by \$50 would raise an estimated \$2 million a year.²

¹ Texas Natural Resources Code Ann., ch. 91, sec. 91.111, requires the Commission to notify the Comptroller when the fund balance reaches \$10 million, at which time oil field cleanup regulatory fees on oil and gas are not collected.

² Joint Association Committee Final Recommendations, *Texas Industry Funded Oilfield Cleanup Fund*, September 27, 2000, provided to Sunset staff (Austin, Texas, October 18, 2000).

Issue 2

Without Adequate Financial Assurance and Enforcement, the State Will Continue to be Burdened with Abandoned Wells.

Summary

Key Recommendations

- Phase in universal bonding of oil and gas operators by September 1, 2003.
- Enhance information included on permit applications.
- The Railroad Commission should ensure that ineligible operators are denied drilling permits, and that responsible parties are held accountable for violations.

Key Findings

- Current financial security options have not been effective at curbing the increase in abandoned wells and sites, leaving them to be plugged and cleaned up by the State.
- The State's informal enforcement efforts do not adequately address some serious pollution violations.
- The Commission, and other states, have recognized the need to do more to hold operators responsible for the threat their activities pose to the environment.

Conclusion

The Commission's recent rule change regarding well plugging extensions went as far as the current law allows. The Commission should continue the move toward a system that guarantees adequate financial assurance from all operators. By phasing in universal bonding, oil and gas operators, the surety industry, and the Commission can address any barriers to making bonds widely available at reasonable cost. The phase-in period will allow the Legislature to make any needed changes to the program in the 2003 legislative session.

While bonding provides up-front security against the threat of pollution, adequate enforcement is the other key component in ensuring protection of the state's land and water resources. State funded plugging and cleanup will be effective only if the Commission aggressively enforces current laws and rules, so that new wells and sites do not enter the system. Available data shows that surface owners are a key part of the Commission's enforcement function. Therefore, enhanced access to information about surface owners will provide additional oversight tools in the field. Finally, although currently statutorily required to do so, the Commission should redouble efforts to deny permits to ineligible operators and address long-standing inadequacies in its enforcement function.

Support

Current Situation: State law requires the Commission to ensure oil and gas exploration and production does not adversely impact the state's land and water resources.

Financial Security Options

- Individual Performance Bond - An "insurance policy" for all of an operator's wells.
- Blanket Performance Bond - An "insurance policy" covering an organization's entire operations.
- \$100 Annual Fee - An administrative fee available to an operator with an acceptable compliance record.
- Three Percent Fee - A fee equal to three percent of the bond that would otherwise be required.
- First Lien - A lien on property associated with oil and gas production that an operator may give the Commission. Rarely used.

- A major responsibility of the Commission is to protect the environment. Water protection is a consideration in many of the Commission's statewide rules. Industry practices have been recognized as potential and actual sources of pollution.¹ These sources include improperly plugged or abandoned wells, co-produced salt water, old disposal pits, and crude oil seepage into surface water. The Commission has two strategies for dealing with these environmental threats. First, it requires financial security from all oil and gas operators, and it requires assurance from these operators that inactive wells will ultimately be plugged. The second strategy is to bring enforcement actions against operators who violate anti-pollution laws and rules.

- Financial security requirements are intended to provide up-front assurance that operators – and not the State – will be responsible for plugging wells after they have stopped producing, by ensuring that resources will be available in the event that an operator abandons a site. Business entities conducting oil and gas business under the Railroad Commission's regulatory authority are required to execute a bond or alternate form of financial security, as discussed in the textbox, *Financial Security Options*.

The most widely used financial security option is the \$100 annual fee. To take advantage of this option, an operator must have an acceptable compliance record for the previous four years. Commonly known as the "good guy option," this provision only relates to the financial security arrangement between the operator and the Commission to engage in oil and gas exploration and production. It is not the same \$100 fee that relates to extending the time for plugging an inactive well.

- Related to financial security requirements, the Commission also requires operators to meet their obligation to plug inactive wells. Those operators meeting their financial security requirements with bonds or letters of credit satisfy the obligation to ultimately plug an inactive well. However, many unbonded operators have inactive wells. The only legitimate reason for delaying the plugging of an inactive well is that it may be returned to service related to oil and gas production. For this reason, the law allows an unbonded operator to pay \$100 per well to file an annual extension, to avoid

plugging an inactive well. This extension is commonly known as the W-1X program.

- Another key component of the regulatory framework is the agency's enforcement function. Swift and aggressive enforcement of state pollution laws and Commission rules minimizes pollution and ensures that responsible parties, and not the State, plug inactive wells and clean up abandoned sites. The Field Operations Section is the Commission's front-line for enforcement activities. Field inspectors, based out of the agency's nine district offices, conduct routine inspections and respond to citizen complaints. In fiscal year 1999, field inspectors conducted 141,109 inspection activities (one "job" may involve a number of inspection activities), and found 116,461 rule violations, of which 67,992 violations were pollution related.

The vast majority of documented rule violations are resolved at the district office level, and no formal action is taken in Austin. For example, in fiscal year 1999, 630 cases, each with three or four violations per case, or roughly five percent of all documented pollution-related rule violations, were referred to Austin for enforcement. Once a violation is referred to Austin, the Office of General Counsel establishes an enforcement case, usually resulting in the Commission assessing penalties.

The current system of financial security options has not diminished the State's oil field cleanup liability.

Problem: Current financial security options have not been effective at curbing the increase in abandoned wells and sites, leaving them to be plugged and cleaned up by the State.

- The financial security options, established in 1991, have not diminished the State's oil field cleanup liability. According to the Commission, the number of documented inactive wells has grown from 64,000 to nearly 102,000 in the last decade.² More importantly, the number of wells that are not in compliance with the Commission's rules regarding inactive wells has grown from 21,000 wells in fiscal year 1992, to 25,672 wells in fiscal year 1999.³
- While some inactive wells are returned to service, generally the longer a well remains inactive, the less likely it will ever return to productive service. As of January 2000, of 21,561 inactive wells in compliance because of the annual \$100 extension fee, 6,430 wells, or 30 percent, had been granted five or more plugging extensions.
- Since the Oil Field Cleanup Fund's inception in 1991, fully 99 percent of the abandoned wells plugged at State expense were wells owned by unbonded operators.⁴
- District office staff resolve roughly 95 percent of all pollution related oil and gas violations at the district level.⁵ While this practice

effectively supports the ultimate goal of having operators come into compliance with Commission rules, it undermines any system of financial assurance based on compliance history because violations do not rise to the level of Commission action, and thus do not appear on any centrally maintained compliance record. One effect of this practice is that a majority of operators are eligible for the “good guy option,” and can easily avoid putting up a bond to satisfy their financial security requirement.

Problem: The State’s informal enforcement efforts do not adequately address some serious pollution violations.

When an operator does not pay for plugging and cleanup, the State ends up paying the costs.

- The Commission has been unable to effectively hold noncompliant operators accountable for violations. From fiscal year 1994 through fiscal year 1999, the Commission assessed over \$27 million in penalties for violations involving pollution or potential pollution, but collected only \$4 million. By law, this penalty revenue is deposited in the Oil Field Cleanup Fund.

More than half of assessed penalties were for failure to comply with the Commission’s well plugging rules. The chart, *Railroad Commission Penalties and Reimbursements – Fiscal Year 1994-1999*, shows the Commission’s inability to collect penalties. According to Commission staff, this problem reflects the type of operators referred for formal enforcement; most of these operators are insolvent or cannot be located. This failure means not only that the State pays for the cost of plugging and cleanup, but also that noncompliant operators are not paying their share into the Oil Field Cleanup Fund.

Railroad Commission Penalties and Reimbursements Fiscal Year 1994 - 1999						
	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99
Assessed*	\$4,475,463	\$4,330,510	\$2,866,635	\$4,087,650	\$6,816,040	\$4,657,522
Paid**	\$850,308	\$568,737	\$364,079	\$554,820	\$673,293	\$1,045,666
	(19%)	(13%)	(13%)	(14%)	(10%)	(22%)

* Administrative penalties assessed by the Railroad Commission.
 ** Administrative and civil penalties and reimbursements paid to the State.

- Citizen complaints play an important role in compliance, as shown in the chart, *Violations from Complaint Inspections – Fiscal Year 1999*. Since most oil and gas production is on private land, complaints primarily come from surface owners. However, the name and address of the surface owner is not included on a drilling permit,

effectively eliminating an important source of information on past operator performance for the Commission.

Violations from Complaint Inspections – Fiscal Year 1999			
# Complaint Inspections	% of Overall Inspections	#Violations on Complaint Inspections	% of Overall Violations
8,286	6%	25,166	22%

- The Commission’s limited information and tracking systems, along with limited staff resources, allow repeat violators to avoid enforcement. For example, using a social security number one time and a drivers license number the next time, a person with an outstanding violation can file a new application to conduct business under a different company name. Further, although required by law, the Commission cannot routinely track the compliance record of the partners in an organization before approving a permit, nor has it historically pursued non-operator owners for the cost of plugging a well. These problems are not new to the Railroad Commission. Legislative reports from 1971, 1982, and 1993 reflect a history of enforcement issues.⁶

Comparison: The Commission, and other states, have recognized the need to do more to hold operators responsible for the threat their activities pose to the environment.

- In a recent attempt to address the ineffectiveness of its inactive well program, the Commission adopted important changes. New rules, effective November 1, 2000, will require more frequent testing of inactive wells to determine if they pose a pollution threat; and will limit the use of the \$100 annual extension fee, by requiring an individual well bond after three years of inactivity. In addition, the new rules attempt to address the problem of plugging liability being shifted to judgment-proof operators by requiring an individual well bond, W-IX fee, and testing before transfer of an inactive well.

The recent rule changes stretch the limits of the Commission’s authority and still leave gaps in enforcement and accountability. Under the new approach, operators still have three years to abandon a well before being required to execute a bond, having only paid \$100 each year to avoid plugging. Further, the rules allow an operator to select a method of testing that may not completely determine whether or not pollution is occurring.⁷

- Texas is one of only two of the 32 oil producing states that does not require bonding of all wells.⁸ The Commission requires coal mining companies to execute a performance bond to ensure that land is returned to beneficial use after mining operations have ceased. Because land reclamation for mining activities may take years to complete, the Commission releases these bonds in phases.

Limited information and tracking allows repeat violators to avoid enforcement.

Recommendation

Change in Statute

2.1 Phase in universal bonding of oil and gas operators by September 1, 2003.

This recommendation would give the Commission statutory authority to phase in a requirement that every operator filing an organization report executes and files a bond with the Commission. This recommendation would not change the current law allowing an operator to choose an individual performance bond or a blanket performance bond covering all operations, nor would it change the required bond amount currently set in statute. This recommendation would repeal the \$100 a year “good guy option” and first lien option, but maintain the three percent fee as an alternative option for two years from the effective date of legislation. Further, this recommendation would require immediate bonding prior to transfer of an inactive well, and increased bond amounts for bay and offshore wells.

2.2 Enhance information included on permit applications.

This recommendation would require the Commission to adopt a rule requiring drilling permits to include the name and address of the surface owner of the drill site as shown on the real property tax roll in the county where the well is located.

Management Action

2.3 The Commission should ensure that ineligible operators are denied drilling permits, and that responsible parties are held accountable for violations.

Although currently statutorily required to do so, the Commission should redouble efforts to deny permits to ineligible applicants, focusing not only on the operator of record, but also on owners, officers, and directors. Further, the Commission should pursue all legally responsible parties to recover the cost of plugging or cleanup, with state funds to be used only as a last resort. Finally, the Commission should take all necessary steps to improve its information tracking systems, and develop a formal, centralized system to track high-risk operators for inspection and enforcement purposes. Risk should be based on prior compliance history, including violations resolved at the district level.

Impact

The Commission’s recent rule change regarding well plugging extensions went as far as the current law allows, by limiting the number of extensions an operator can receive before requiring an individual well bond. The recommendation to phase in universal bonding would give the Commission the statutory authority to back up these program changes and continue the move toward a system that guarantees adequate financial assurance from all operators. The phased-in approach will allow operators and the surety industry to get ready for these changes. The Railroad Commission, with input from the surety industry, should evaluate bonding requirements to address barriers to making

bonds widely available at reasonable cost. The Commission should propose any needed statutory changes based on its evaluation to the Legislature before the 2003 Session.

While bonding provides up-front security against the threat of pollution, adequate enforcement is the other key component in ensuring protection of the state's land and water resources. State-funded plugging and cleanup will be effective only if the Commission aggressively enforces current laws and rules, so that new wells and sites do not enter the program.

Fiscal Implication

Without any additional changes to the Commission's fee structure, repealing the \$100 per year "good guy option" would have a negative fiscal impact of approximately \$700,000 annually to the Oil Field Cleanup Fund.⁹ However, the higher three percent fee-in-lieu-of-a-bond would continue to be available to operators during the phase-out period, potentially off-setting this revenue loss. In addition, recommendations included in Issue 1 of this report would give the Commission more flexibility in setting fee amounts that accrue to the Oil Field Cleanup Fund. With this authority, the Commission would be in position to increase fees in some areas to compensate for lost revenue in others. Further, the recommendation to require immediate bonding prior to transfer of an inactive well would diminish the need for future state-funded plugging. Finally, the recommendations may require information systems upgrades and additional resources to allow the Commission to enforce current statutory requirements.

¹ Railroad Commission of Texas, *Water Protection Manual*, Oil and Gas Division, (Austin, Texas, 1999).

² Railroad Commission of Texas, *Preamble to rule amendments to §3.14, relating to plugging, and §3.78, relating to fees*, (filed with the Office of the Secretary of State (Austin, Texas, September 14, 2000).

³ Ibid.

⁴ Ibid.

⁵ Based on Railroad Commission fiscal year 1999 inspection data provided to Sunset staff.

⁶ 62nd Legislature, *Joint Report of the Committees on Pipeline Study and Beaches*, (Austin, Texas, May 1971); Texas House of Representatives, *Report of the Natural Resources Committee*, (Austin, Texas, October 12, 1982); Office of the State Auditor, *A Performance Audit of the Oil Field Cleanup Program and Related Enforcement Efforts*, Report No. 3-113, (Austin, Texas, April 1993).

⁷ The rule allows operators to perform a fluid level test, but does not require a mechanical integrity test.

⁸ Interstate Oil and Gas Compact Commission, *Produce or Plug* (June 2000).

⁹ In fiscal year 1999, the \$100 "good guy option" accounted for \$708,660 in revenue to the Fund.

Issue 3

Landowners and Developers Do Not Have Sufficient Incentive to Clean Up Contaminated Oil Field Sites.

Summary

Key Recommendation

- Authorize the Commission to create a voluntary cleanup program, separate from the operator cleanup program, which allows landowners and developers to be statutorily released from liability for future cleanup costs.

Key Findings

- The State has a significant number of unremediated oil fields.
- The State has limited resources with which to address site remediation.
- Other state agencies have voluntary cleanup programs to help reduce the inventory of sites awaiting cleanup.

Conclusion

Limited funding and increased cleanup costs hinder the Commission's ability to adequately address the state's active and abandoned oil fields in need of remediation. Potential for privately funded oil field remediation is emerging as the population in Texas swells and suburban development encroaches into rural areas. By releasing landowners from future liability, the Commission can tap into extra resources from developer-funded cleanups on oil fields that may otherwise become the State's responsibility to remediate.

Support

Current Situation: The Commission regulates the cleanup of contaminated oil field sites.

- Crude oil and saltwater spills can occur during everyday operations at an oil field. Most spills are small, requiring minimal remediation by the operator. However, some spills result in serious contamination that involves complex and expensive remediation. Examples include crude oil leaks from storage pits or well casings, both of which risk contaminating surface water and groundwater.
- The Commission learns of polluted oil field sites and abandoned wells in several different ways. Reports of contamination usually arrive at a Commission district office via citizen complaints, local government complaints, staff field inspections of abandoned wells, or self-reporting from operators.
- Although less often, an environmental assessment of land required as part of a property sale may also alert the Commission of polluted oil field sites. Frequently, these sites are inactive oil fields sold by operators and bought by developers.
- State law requires active operators to pay for their own cleanups. Although active operators report and remediate more than 1,000 small oil field spills each year, the Commission oversees only the complex operator cleanups. Complex operator-funded cleanups take anywhere from a few months to several years to complete, depending on the type of contamination. Since 1992, operators have cleaned 173 complex sites. When they clean oil field sites to an acceptable standard, they qualify to be released from liability for future cleanup costs by the Commission via a “no further action” letter. This letter allows sellers to assure realtors and developers that land has been adequately cleaned and the Commission will not pursue enforcement for additional cleanup at a future date. The Commission has issued approximately 50 “no further action” letters to date.
- Operators or landowners who fail to clean up their land are subject to enforcement action by the Commission, including administrative and civil penalties. If, however, an operator goes out of business and abandons a contaminated oil field, the State pays for remediation using the Oil Field Cleanup Fund. Costs for remediation range from \$2,000 to \$500,000 per site, depending on the extent of contamination, and the cleanup level that must be achieved to protect public health and the

If an operator abandons an oil field, the State pays for remediation using the Oil Field Cleanup Fund.

environment. The Commission tries to recover these costs from operators.

Problem: The State has a significant number of unremediated oil fields.

- The State currently has 2,484 oil field sites, both abandoned and active, awaiting either state funding for cleanup or staff technical assistance for private remediation. This figure represents 627 active complex operator-funded cleanups which the Commission is currently monitoring, plus an additional 1,857 abandoned sites in need of technical review and State funding for remediation.
- The nature of the oil and gas business contributes to the likelihood that more oil field sites will need to be remediated in the future with the decline in oil production in Texas.¹ Small independent producers now outnumber major oil producers in oil production. In 1996, independent oil operators produced 56 percent of the state's oil, representing an increase from 1980 when only 38 percent came from independent oil producers.²
- Most small independent operators do not have the resources or expertise to adequately deal with contaminated oil fields and are more likely to abandon sites than major producers. The correlation between regions of the state with abandoned oil fields and regions occupied by independent operators illustrates this point. The Wichita Falls district, an area traditionally associated with independent oil production, has 300 abandoned oil fields, compared with 84 in Midland, a district occupied by major oil companies. In contrast, oil field spills cleaned with operator funds are much higher in the Midland district, which has had 155 cleanups, whereas the Wichita Falls district has had only ten.
- As the Commission identifies and plugs more abandoned wells, more unremediated oil fields will be found. A cluster of abandoned wells often signifies an abandoned oil field that may be contaminated and in need of remediation. Commission well plugging staff estimate that 25 percent of the abandoned wells they plug alert them to abandoned oil fields in need of remediation.

Problem: The State has limited resources with which to address site remediation.

- While the number of abandoned sites is expected to increase, State funding for cleaning abandoned oil fields has remained static, and is expected to decline. The Oil Field Cleanup Fund provides funds to the Commission for the purpose of plugging abandoned wells and remediating abandoned oil field sites. Fund revenue comes from production fees paid by the oil and gas industry. As Texas' oil

Commission staff
expect the number
of unremediated,
abandoned oil fields
to increase.

production levels decline, operators will pay fewer fees, resulting in less revenue for the Fund.

- As the revenues in the Oil Field Cleanup Fund decline, the costs for remediation increase. Commission staff project that many of the 1,800 abandoned oil fields awaiting cleanup are complex sites, requiring expensive remediation. For example, costs for remediation jumped from an average of \$4,259 per site between 1992 and 1999 to \$9,408 per site in 2000, when the Commission began to tackle more complex cleanups. In 2001, the Commission has 215 complex sites scheduled for cleanup, with costs estimated at approximately \$26,000 per site.

Comparison: Other state agencies have voluntary cleanup programs to help reduce the inventory of sites awaiting cleanup.

- In 1993, the Legislature authorized the Texas Natural Resource Conservation Commission (TNRCC) to develop administrative, technical and liability release provisions to encourage participation in the remediation of contaminated sites under the agency's jurisdiction. Through its Voluntary Cleanup Program, TNRCC formally releases participants from any future liability to the State for cleanup costs. TNRCC also approves cleanup procedures, provides cleanup oversight and issues certificates of completion after the site has been remediated. The program primarily targets small business and local governments seeking to convert contaminated properties into economically productive ones. An eligible site may not be involved in TNRCC's enforcement process. Since the Program's 1995 inception, TNRCC has received 1,173 applications, with 540 completion certificates issued.

Recommendation

Change in Statute

3.1 Authorize the Commission to create a voluntary cleanup program, separate from the operator cleanup program, which allows landowners and developers to be statutorily released from liability for future cleanup costs.

This recommendation would authorize the Commission to establish by rule a voluntary cleanup program, providing landowners and developers with statutory release of liability for future cleanup costs. The Commission would be allowed to charge a processing and review fee, deposited in the Oil Field Cleanup Fund, to defray expenses. This recommendation should be contingent upon the agency's adoption of a risk assessment rule (Issue 4), which will ensure that the Commission's site remediation program is not expanded without instituting clear cleanup measures. Program staff

would work closely with potential participants in developing cleanup plans and providing technical oversight during the cleanup process. The agency should consult with TNRCC, which as stated previously, operates a similar program for remediation.

Impact

The intent of this recommendation is to create additional resources with which the State may address a growing pool of abandoned, unremediated oil fields. By offering actual statutory release of future liability to landowners and developers, rather than a “no further action” as it currently issues to operators, the Commission may improve its oil field remediation efforts. The recommendation should encourage developers to purchase already abandoned oil fields by offering technical expertise and the incentive to clean up these sites, without fear of liability for future cleanup costs. By promoting incentives for oil field remediation, this recommendation will provide for better management of the state’s environmental resources.

Fiscal Implication

The recommendation requiring the Commission to create a voluntary cleanup program will have a fiscal impact to the State. The recommendation will require the Commission to hire staff to oversee and monitor voluntary cleanups, to ensure they are done to Commission standards. The actual cost will depend on how many landowners choose to participate in the program. For each employee needed, the Commission estimates a cost of \$67,400 per employee including salary and associated costs. These costs would be funded through the Oil Field Cleanup Fund. The recommendation should result in a long-term savings to the State since each voluntary cleanup alleviates the need to ultimately use Oil Field Cleanup Funds to remediate the site.

¹ Texas Railroad Commission, *Legislative Appropriations Request for Fiscal Years 2002 and 2003*, (Austin, Texas, August, 2000), p. 2.

² Texas Railroad Commission, *Texas Natural Resources Study: A Status Report on the Hydrocarbon Industries of Texas*, (Austin, Texas, April 1997), p. 45-61.

Issue 4

The Commission's Site Remediation Efforts Lack Clear Risk Assessment Standards and Miss Opportunities for Pollution Prevention.

Summary

Key Recommendations

- Require the Commission, by rule, to establish a risk-based assessment to guide site remediation efforts.
- Require the Commission to prioritize high-risk abandoned wells, under its jurisdiction, for annual tests.

Key Findings

- Lack of a standard risk assessment rule hampers the ability of operators and the Commission to protect the environment.
- Lack of monitoring of abandoned wells for leaks limits the Commission's ability to protect the environment.
- TNRCC has recently adopted base-level risk assessment standards for consumers and regulators to use in site remediation.

Conclusion

The Commission's process for addressing a growing number of contaminated and unremediated oil field sites has been hampered by the lack of a risk assessment rule. Once a spill occurs, a risk assessment is conducted that tailors cleanup levels to prevent adverse effects to people or ecosystems from contaminant exposure. Without a risk assessment rule, private operators and contractors spend extra time speculating which cleanup standards to apply to a particular remediation. The Commission does not conduct testing on abandoned wells under its own purview, affecting its ability to identify wells that may be contaminating surface water or groundwater, which should be prioritized for State-funded plugging.

These recommendations will improve the Commission's ability to assist operators and contractors in cleaning contaminated oil field sites and preventing additional contamination, when possible. The targeted testing of abandoned wells could prevent problems from leaking wells causing additional contamination that will need remediation.

Support

Current Situation: The Commission is responsible for overseeing pollution remediation efforts related to oil and gas production.

- Active oil and gas operations sometimes experience accidental spills or leaks, which are considered aberrations from the normal byproducts of daily production activity. When such a situation occurs, the Commission has separate procedures for dealing with it, depending on whether the cleanup is in a non-sensitive or sensitive area. In non-sensitive areas, operators and contractors contact the Commission about the nature of the cleanup, following the Commission's cleanup rule. If the site cannot be cleaned as specified, it may become a complex site and be treated as if it were in a sensitive area.

For cleanups in a sensitive area, the Commission's remediation staff reviews each case individually. These sites are generally considered "complex," and include the following areas:

- shallow groundwater pathways for communication with deeper groundwater;
- surface water, including lakes, rivers, streams, dry or flowing creeks, irrigation canals, stock tanks, and wetlands;
- natural wildlife refuges or parks; and
- commercial or residential areas.

In these situations, operators report, plan, and execute their own remediation efforts, but rely on the Commission to approve each step of the process. In the end, an operator executing a complex site remediation submits at least five separate status reports to the Commission. One of these reports, the assessment report, details the types and quantities of contaminants at a site. This report may or may not contain information relating to the level of risk to the public or the environment. Currently, the Commission is overseeing 627 operated-funded complex sites.

- Operators must also conduct tests on their inactive wells' casings, which is the steel tubing that lines a well after it has been drilled. Two types of tests are used to test well integrity. A fluid level test, which is less expensive, measures the level of fluid in a well. This determines if fluid in a lower zone has risen to a level that could contaminate fresh water in a higher zone. Mechanical integrity testing, a more expensive method, applies pressure in a well's casing to detect any leaks in the casing.

The Commission oversees only complex cleanup activities - operators clean up simple spills on their own.

- The Commission conducts State-funded remediation at abandoned oil field sites. In these circumstances, the Commission contracts with private environmental consultants who propose and conduct cleanup plans, while the Commission’s technical staff provides oversight.
- The Commission categorizes and prioritizes cleanups based on risk-level – routine cleanups, emergency cleanups, complex cleanups requiring detailed assessments, and cleanups that might benefit from temporary abatement measures. The textbox, *Site Remediation Categories of Cleanup*, describes types of contamination usually found in each risk level.
- Risk assessment is a type of methodology environmental regulators use to establish remediation standards based on risk to human health and ecological factors. Risk assessment uses logical progression in assessing a contaminated site by developing public health and environmental safety cleanup levels and evaluating response actions. Risk assessment is also commonly referred to as “risk-based corrective action” or “risk reduction.” The type and quantity of a contaminant, as well as its proximity to humans, wildlife, and surface and groundwater, informs an operator of the level of risk present. Using this information, the operator calculates the amount of time for remediation, and the expected cost.

<p>Site Remediation Categories of Cleanup</p> <p><u>Routine</u>: abandoned salvage equipment, such as drills and piping; contaminated tanks; open storage pits; and flow line spills.</p> <p><u>Emergency</u>: crude oil or sale water spills, open pits leaks from rain. These cleanups occur within 24 hours of notification.</p> <p><u>Assessment</u>: gas processing plants, abandoned disposal facilities, abandoned reclamation facilities, and groundwater plumes.</p> <p><u>Abatement</u>: covering open pits, enclosing oil drums in plastic tarp, erecting fences around low-risk sites.</p>

Problem: Lack of a standard risk assessment rule hampers the ability of operators and the Commission to protect the environment.

- The Commission doesn’t have a risk assessment rule that provides minimum cleanup standards and methodology to guide operators and contractors in their remediation efforts. Because of the lack of regulatory guidelines, operators apply other state and federal risk assessment standards to their situation, hoping the Commission will approve.

For example, in Texas, oil and gas operators consult three different, but commonly used industry standards when devising cleanup plans: the U.S. Environmental Protection Agency Superfund cleanup rules, the Association of Standard Testing Materials’ Risk Based Corrective Action guidelines, and Texas Risk Reduction Program rule of TNRCC. Each standard presents different requirements for investigation, cleanup levels, and soil and groundwater objectives, leaving both the operator and regulator confused as to which standard to use in each situation.

Commission staff, who determine cleanup requirements on a site-by-site basis, spend a great deal of time reviewing plans that have

relied on cumbersome methodologies. As a result, the agency estimates that it returns 90 percent of all operators' initial assessment reports with requests for additional information.

- The particular standard an operator or contractor uses to clean a contaminated oil field site may depend on who is consulted, the level of cost, and the amount of time available. The complexity and uncertainty may encourage some operators or contractors to choose the quickest, most cost-efficient solution, with less emphasis on public and environmental safety measures.¹ Other operators may assume a higher cleanup cost resulting from not having proper information about the level of risk and the remediation process for each individual contaminant, thus over-remediating a site.
- Risk assessment is often the sole means for determining when extensive pollution exists, to what extent, and where. An example of this involves a major oil company with an oil field outside of Houston.

In 1992, the company was responsible for cleaning several leaking pits on the oil field site in a non-sensitive area. After several years of remediation using a less expensive bio-degradation method, the company conceded in May 1999 that it had not successfully remediated the site. The company proposed and conducted a risk assessment, taking into consideration who might come into contact with the site. The risk assessment ultimately revealed contaminated groundwater, a much larger problem than originally thought, requiring more extensive remediation. Without the risk assessment, the State would not have known the extent of the threat to public health and environmental safety.

Problem: Lack of monitoring of abandoned wells for leaks limits the Commission's ability to protect the environment.

Well tests help prevent pollution by alerting operators to possible leaks.

- The Commission's Well Plugging Program requires operators to submit annual reports on tests of unbonded, inactive wells, and periodic tests for inactive wells more than twenty-five years old. In contrast, the Commission does not require tests on any of the 17,000 abandoned wells under the State's jurisdiction. In addition, the Commission's well plugging priority system focuses primarily on ground-level evaluation factors and not on downhole conditions.
- Without the appropriate test, determining if a well's casing is intact is difficult. Inactive oil and gas wells with cracked casing can leak saltwater and oil, which contaminate groundwater, ruining the water's potability and use in agricultural activities. Groundwater pollution is not only the most expensive contamination to remediate, it is preventable if the problem is detected early with regular well testing.

Comparison: TNRCC has recently adopted base-level risk assessment standards for consumers and regulators to use in site remediation.

- TNRCC recently adopted the Texas Risk Reduction Program rule delineating bottom-line risk assessment standards for environmentally contaminated sites under its jurisdiction.² The agency continues to have high-level rules for specific site remediation projects, but recognizes that industries and consultants had difficulty adhering to each rule, which sometimes resulted in contradictory regulatory approaches and cleanup objectives. The current rule addresses the need for regulators and landowners to have practical standards for guiding environmental cleanups.

Recommendation

Statutory Action

4.1 Require the Commission, by rule, to establish a risk-based assessment to guide remediation efforts.

This recommendation would require the Commission to establish risk assessment as the guide for assessing and remediating contaminated oil and gas sites. The rule should include the following:

- determining if an actual or potential risk exists at a site;
- screening contaminants at the site to identify those that pose a risk;
- developing cleanup standards based on contamination levels that are protective of human health and the environment, and preserve the active and productive use of the land; and
- establishing a reporting mechanism for informing the Commission regarding specific remediation activities.

4.2 Require the Commission to prioritize high-risk abandoned wells, under its jurisdiction, for annual tests.

This recommendation would require the Commission to identify abandoned wells in the State's inventory that have a higher risk of contaminating surface water or groundwater and annually test those wells. The prioritization system should include an evaluation of whether a fluid level test is adequate or whether a more expensive pressure test is needed. High-risk wells with compromised casings should be prioritized for plugging in the Commission's Well Plugging Program.

Impact

The intent of these recommendations is to improve the Commission's ability to assist operators and contractors in cleaning contaminated oil fields, and prevent additional contamination when possible, thereby ensuring better protection of public health and environmental safety. The State's inventory of unremediated oil fields is extensive and is expected to grow. By using a risk assessment tool and providing concise cleanup guidelines, the Commission will have a more effective remediation process for contaminated oil fields.

In addition, the State could reduce the number of oil field sites in need of remediation by regularly testing high-risk abandoned wells for pollution threats from compromised casing integrity. Since the Commission requires private operators to annually test and report the integrity of an unbonded inactive well's casing, the Commission should also perform tests on the riskiest abandoned wells in the State's inventory. Periodic testing of these high priority abandoned wells will assist the Commission in its remediation efforts by helping prioritize sites in the State inventory for state-funded plugging, preventing the need for remediation later.

Fiscal Implication

The recommendation requiring the Commission to establish risk-based assessment and remediation guidelines could have some fiscal impact, due to process and system changes. The recommendation requiring the Commission to annually test certain abandoned wells would be a cost to the State. Based on the number of wells identified by the Commission for testing, the annual cost would range from \$150 per well, for basic fluid level testing, to \$1,000 per well, for mechanical testing. These costs would be funded from the Oil Field Cleanup Fund. The Sunset staff could not estimate the number of wells that may require testing.

¹ Telephone interview with former Railroad Commission Enforcement Section staff (Austin, Texas, September 28, 2000).

² Texas Administrative Code Title 30 §350.

Issue 5

State Regulation of Pipelines Does Not Adequately Protect the Public.

Summary

Key Recommendations

- Require the Commission to develop a framework to guide decisions on bringing pipelines outside of its jurisdiction under regulation.
- Authorize the Commission to require a pipeline operator to submit an assessment or testing plan for Commission approval.
- The Commission should create an enforcement coordinating function within the Pipeline Safety Section.

Key Findings

- The Commission does not have a consistent process for gathering information on pipeline system integrity and using special investigations to help bring pipelines, which may have safety risks, under jurisdiction.
- The Commission does not have a consistent structure to use administrative penalties for the enforcement of pipeline safety regulations.
- Other state agencies have developed processes to ensure compliance and enforcement consistency.

Conclusion

The Railroad Commission does not have a clear process for determining which pipelines outside its scope of jurisdiction need safety regulation. As a result, the Commission may not be in a position to assess risk of all pipelines to determine where additional regulatory oversight is necessary.

These recommendations would establish a framework for the Commission to determine if a pipeline should be under its regulations and if action is needed to avoid pipeline mishaps. The recommendations would also standardize the Commission's process for taking administrative enforcement action against pipeline operators by assessing administrative penalties. With these changes, the Commission would be in a better position to know about the risks associated with all pipelines in the state and to take needed action to reduce those risks.

Support

Current Situation: The Railroad Commission is responsible for regulating the safety of intrastate pipelines in Texas.

- The state has 280,000 miles of pipelines transporting natural gas, hazardous liquids, and crude oil. The chart, *Texas Pipeline Mileages*, shows the miles of each type of pipeline. Texas has regulatory authority over most intrastate lines, and can request inspection authority from the federal Department of Transportation (DOT) over interstate lines. Interstate lines are typically under federal jurisdiction.

Texas Pipeline Mileages	
Distribution	75,000
Interstate Lines	80,000
Transmission	39,000
Liquids (includes gathering)	39,000
Production (includes gathering)	47,000
Total	280,000

In the last 10 years, 22 persons have died and 175 have been injured due to pipeline accidents in Texas.

The Commission has direct safety authority over approximately 157,000 miles of pipeline in the State. Jurisdiction for pipeline safety starts after hydrocarbon production and gathering from the wellhead to a central processing facility is completed. The types of pipeline systems under Commission authority include transmission, distribution, and some gathering lines in urban areas. The Commission has not assumed authority over almost 43,000 miles of rural gathering lines, but has the statutory authority to bring rural gathering lines under state regulation.

- The Pipeline Safety Section has 28 inspectors that spend approximately 85 percent of their resources inspecting natural gas lines and 15 percent inspecting hazardous liquid lines. Division staff inspect a pipeline every one to three years, using a risk based prioritization system. The chart, *State Pipeline Inspection Frequencies*, shows how often the agency inspects different types of pipelines.

State Pipeline Inspection Frequencies				
Pipeline Type	Natural Gas	Liquids	Crude Oil	Sour Gas
Transmission	1 to 3 years	1 to 2 years	1 to 2 years	annual
State Offshore	2 to 3 years	n/a	1 to 2 years	annual
Urban Gathering	1 to 3 years	n/a	1 to 2 years	annual
Rural Gathering	complaint based	n/a	complaint based	complaint based
Distribution	1 to 3 years	n/a	n/a	n/a
Master Meter	5 years	n/a	n/a	n/a

Pipeline failure depends upon several risk factors including third party damage, corrosion, pipe material, and operating/maintenance procedures. The consequences of pipeline failures can include death, injury, environmental damage, and disruption of service. In the last ten years, 22 persons have died and 175 have been injured due to pipeline accidents in Texas.

- When Commission inspectors cite pipeline operators for violations, they initially try to achieve voluntary compliance with regulations.¹ In cases where voluntary compliance is not obtained, inspectors refer the case to the legal division for possible enforcement. Safety violations include exceeding allowable pressures, lack of odorization, contributing factors to an accident, and repeat violations. The number of individual pipeline violations has decreased from approximately 11,494 in 1996, to 9,022 in 2000.²

Current Situation: The Commission can use special investigations to assist in determining the condition of pipelines.

- The Commission uses a permit process, safety evaluations, and smaller special investigations to help determine if a pipeline is within the agency’s jurisdiction, or to decide to regulate non-jurisdictional gathering lines. For example, the Commission may inspect an out-of-service system that it placed back in service, and determine if the system comes under state safety regulations.³
- Larger special investigations are a useful tool for the Commission to use to help ensure public safety. For example, these investigations may identify non-jurisdictional gathering lines with potential violations that could adversely impact public safety as development encroaches. A 1998 large scale special investigation of a 6,836 mile pipeline system found that gathering lines had the highest percentage of potential violations, as indicated in the chart, *Pipeline Large Scale Special Investigation Results*. The investigation uncovered 427 violations including a lack of testing, documentation, and physical deficiencies.⁴
- In the 1998 special investigation, gathering lines comprised slightly more than one-third of the system’s miles, but accounted for almost two-thirds of what would have been considered violations if these lines were regulated. By comparison, the intrastate lines under Commission jurisdiction had only 15 violations.

A pipeline special investigation found 427 safety violations, of which 262 were in unregulated gathering lines.

Pipeline Large Scale Special Investigation Results		
Type of Pipeline	Percentage of Pipeline Inspected	Number of Violations
Intrastate	31 percent	15
Interstate	33 percent	150
Gathering	36 percent	262
Total		427

- The Commission can also use special investigations to help evaluate systems constructed before federal minimum safety standards were adopted in 1971. Texas has approximately 117,000 miles of “pre-1971” pipeline. These types of systems can be at a higher risk for accidents because of their age and the fact they may have operated for extended periods of time without regulation. The Commission can request temporary delegation of inspection authority from DOT for pre-1971 pipelines to include these systems in an investigation. When the Commission finds potential violations in an interstate pipeline not under its regular jurisdiction, the Commission forwards these violations to DOT for enforcement.

Problem: The Commission does not have a structured process for evaluating pipelines outside its jurisdiction and bringing those pipelines under its regulations when needed.

The Commission does not systematically examine problem pipelines for possible regulation.

- The Commission does not use the permitting process and the special investigations as discussed above, in a systematic way to identify problem pipelines outside its current scope of regulation and bring them under regulation. Except for large scale special investigations, which are rare, potentially dangerous systems remain unregulated.
- Although the Commission has proposed new rules for pipeline assessment and testing plans, it currently does not have a process for directly assessing the condition of pipelines under its jurisdiction, or those that should come under its jurisdiction. As a result, the Commission does not have all the information it needs to identify risk factors associated with specific pipeline systems, which would then drive jurisdiction decisions.

Problem: The Commission does not have a consistent structure to use administrative penalties for the enforcement of pipeline safety.

- The Commission does not have procedures in place to ensure the enforcement process is consistent and that appropriate documentation of penalties is readily available. For example, Commission staff records a penalty amount in the docket but does not use penalty calculation worksheets to track how penalties are calculated and assessed against alleged violators. Without standard worksheets, the Commission has difficulty ensuring consistency in penalty calculations and adequately documenting its enforcement decisions.
- The Commission does not have a designated function, such as an enforcement coordinator, to ensure that enforcement cases are prepared using a consistent set of criteria before referral to enforcement. Without a consistency check, agency inspectors may be placed in the difficult position of conducting inspections, and

then having to carry out enforcement activities based on those inspections.

- As of November 2000, the Commission adopted an administrative penalty schedule for determining fines for pipeline safety violations. Yet, the penalty schedule is only for “guidance” and is not set in statute. By not having the standard factors of the penalty schedule set in statute, the Legislature cannot ensure that it will be used on a consistent basis, potentially resulting in holding some pipeline operators or owners to a different standard of accountability than others.

Comparison: Other state agencies have developed processes to ensure compliance and enforcement consistency.

- The Texas Natural Resource Conservation Commission (TNRCC) has developed a system for ensuring consistency in the enforcement of environmental and safety regulations. TNRCC has enforcement coordinator staff responsible for ensuring that agency inspectors properly document violations, and consistently calculate penalties.
- TNRCC also has a consistent set of policies and procedures to help ensure equal treatment of all alleged violators. For example, the agency posts its compliance and enforcement policies on the Internet to ensure the regulated community has access to the information. In addition, TNRCC uses penalty calculation forms to help ensure inspectors assess penalties consistently. The penalty calculation forms include information such as number of violations, compliance history, severity of the offense, culpability, good faith efforts to comply, and any penalty offsets.
- The Texas Department of Licensing and Regulation has established a nine-page matrix to be used when assessing penalties. The matrix clearly lists each violation along with the recommended language to be used in a letter of reprimand, the fine amounts to be applied to first, second, and third offenses, and other recommended actions such as license revocation or suspension.
- The Commission could revise its penalty structure and penalty assessment matrix on standards found in the statutory provisions of other state agencies. These standards are detailed in the textbox, *Standard Factors to Consider When Assessing Administrative Penalties*.

Despite recent changes, the Commission could add more structure to its enforcement activities.

<p align="center">Standard Factors to Consider When Assessing Administrative Penalties</p>
<ul style="list-style-type: none"> • The seriousness of the violation, including the nature, circumstances, extent, and gravity of the violation. • The threat to health or safety caused by the violation. • The history of previous violations. • The amount necessary to deter a future violation. • Whether the violator demonstrated good faith, including when applicable whether the violator made good faith efforts to correct the violation.

Recommendation

Change in Statute

5.1 Require the Commission to develop a framework for the safety regulation of pipeline systems to guide decisions about bringing pipelines under its regulatory jurisdiction.

The Commission would be required to develop a set of safety risk factors, which could include operational characteristics, to guide its determination of whether a pipeline system should come under the agency's jurisdiction, or be subject to a special investigation. These safety risk factors would clarify Commission authority to retain, or add, pipeline systems under its authority. This framework for safety regulation would be developed independent of, but not in conflict with, federal requirements.

5.2 Specify that the Commission shall include certain standard elements in its penalty structure for pipeline safety violations.

The Commission would develop a set of penalties, and a more standardized process for administering penalties for pipeline safety violations, such as a penalty matrix or penalty calculation worksheet. The penalty structure could include amounts for specific violations, criteria for deferments, and enhanced penalties depending on the level of safety hazard, level of pollution, number of repeat violations, operator culpability, and failure to participate in a special investigation or submit a required assessment plan.

5.3 Authorize the Commission to require a pipeline operator to submit an assessment or testing plan for Commission approval.

The Commission would be authorized to require a pipeline operator to file a pipeline assessment or testing plan for Commission approval. The Commission would require that such a plan consist of certain elements such as identification of risk factors associated with a pipeline system including population density, prior inspection data, pressure test data, leak data, operating characteristics, corrosion protection methods, and other data that may assist with the assessment. The Commission would approve plans addressing those elements and meeting a standard for completeness. The Commission could require that an operator submit a plan for cause, based upon factors such as a lack of maintenance and repair documentation, or other factors that may contribute to the risk of a pipeline accident. The Commission could combine a large scale special investigation with the requirement for an operator to submit an assessment or testing plan, to assure the full assessment of the system.

Management Action

5.4 The Commission should create an enforcement coordinating function within the Pipeline Safety Section.

This recommendation would help ensure the Commission has adequate quality control measures in place for preparing enforcement cases, and ensuring inspectors follow consistent practices when referring a case for enforcement, or when requiring technical assistance on violations. The agency could create a full time position for this function. The enforcement coordinator could also ensure that the Commission tracks, in summary form, the amount of penalties assessed against an alleged violator, compared to the final penalty amount collected.

5.5 The Commission should revise its current policies on pipeline safety enforcement procedures, and post the information on the Internet.

This recommendation would allow the Commission to ensure the regulated community, and general public, is informed about the enforcement process by making a consistent set of policies available. The Commission could model these policies after other state agencies, such as TNRCC.

Impact

These recommendations would ensure the State has the ability to continue the effective safety regulation of pipeline systems, at a time when the demand for natural gas and liquids is increasing, and the current transport infrastructure will be operating at a high capacity. In addition, these recommendations would ensure the State has a clear framework in statute to guide the Commission in its enforcement of pipeline safety requirements. These recommendations would further ensure the Commission has clear authority, and processes, to evaluate systems and bring those systems that may have increased risk factors under state jurisdiction. The Commission will also have the opportunity to introduce greater consistency in the pipeline safety compliance process by using processes in place at other state agencies.

Fiscal Implication

These recommendations will have a fiscal impact to the State. One additional FTE could be needed for the enforcement coordinator function. This is a management decision by the agency. While improved enforcement of pipeline safety violations could result in additional penalty revenue, these amounts could not be estimated for this report. The remaining recommendations can be implemented using existing resources.

¹ Memorandum from Railroad Commission of Texas Gas Service Division to the Commissioners, March 12, 1997.

² Memorandum from the Railroad Commission of Texas to the Sunset Advisory Commission. October 27, 2000 (fax). The number of individual pipeline safety violations is an estimate by Sunset staff using information supplied by the Commission. In 1993, the Commission discontinued reporting individual violations.

³ Railroad Commission of Texas, *Special Investigation No. 00-SA-210* (Austin, Texas, March, 2000).

⁴ Railroad Commission of Texas, Gas Utilities Docket No. 8869 (Austin, Texas, May 1998) p. 1.

Issue 6

Enforcement of Aggregate Quarry and Pit Safety is Not Consistent with the Mission of the Railroad Commission.

Summary

Key Recommendations

- Transfer responsibility for administering the Aggregate Quarry and Pit Safety Act to the Texas Department of Transportation.
- Clarify that the Act applies to all pits and quarries, not just those associated with a processing plant.

Key Findings

- Responsibility for administration of the Aggregate Quarry and Pit Safety Program is not consistent with the mission of the Commission.
- A recent Attorney General's opinion has excluded many pits from regulation.
- TxDOT has a mission more consistent with the goal of protecting the motoring public.

Conclusion

The Commission is responsible for protecting the motoring public from the dangers of quarries and pits by ensuring quarry operators and land owners construct barriers to pits located near public roadways. The requirements of the law are not consistent with the mission of the Commission, which regulates surface mining, and the Commission currently lacks the administrative structure and expertise to effectively administer the program. In addition, a recent Attorney General's opinion has effectively excluded most pits and quarries from regulation, since they are not directly associated with processing plants.

These recommendations will improve the operation of the program by placing it with the agency best suited to achieve the objectives of the law. TxDOT, with its responsibility to manage the state highway system, including improving traffic safety and its district office system, is in a much better position to effectively manage the program. By clarifying the application of the law to all pits and quarries, the State will not exclude unsafe pits from regulation on a technicality.

Support

Current Situation: The Railroad Commission is currently responsible for enforcing the Texas Aggregate Quarry and Pit Safety Act.

- Since 1991, state law generally requires the Commission to protect the motoring public from the dangers of unbarricaded quarries and pits. Certain active and inactive quarries within 200 feet of a public roadway must have adequate guardrails or barricades between the pit and road, and new quarries must have at least a 25-foot setback from a public road. Many quarries are dug to extract sand and gravel used for road construction, often via contracts with counties or the Texas Department of Transportation (TxDOT).
- The law requires responsible parties, typically operators or landowners, to report active and inactive pits to the Commission, which maintains an inventory. The Commission also learns of pits through complaints from citizens or local governments. The Commission then conducts an inspection to determine whether the pit needs a barrier. The Commission receives approximately 150-200 requests for inspections each year. The Commission monitors whether the responsible parties have installed the barriers and judges the adequacy of the barrier, consistent with the Commission's construction standards. Once satisfactorily completed, the Commission issues a safety certificate. As of May 31, 2000, the Commission has issued 838 safety certificates. If a responsible party chooses not to comply with the law, the Commission may initiate an enforcement action.
- Funding for the program initially came solely from application fees for each active and inactive pit or quarry requiring a safety certificate. In 1995, at the request of the Commission, the Legislature changed the funding source to General Revenue. Application fees continued to be collected and deposited in General Revenue. The program, which receives approximately \$46,000 per year, has one employee who inspects quarries and barriers throughout the state for compliance with the law. The Commission has issued one fine for \$10,000, eight years ago, which it had to seek prosecution to ensure compliance with program safety barrier requirements.

Problem: Responsibility for administration of the Aggregate Quarry and Pit Safety Program is not consistent with the mission of the Commission.

- The Surface Mining and Reclamation Division, which is responsible for administering the program at the Commission, exists primarily to enforce federal coal and state uranium surface mining regulations, not the safety of motoring public. Division staff studies proposed mining sites to determine environmental impact, and what procedures should be used in reclaiming the land after mining is finished. Division field personnel make regular visits to mine sites, checking for compliance with Commission rules and permit conditions.
- The Commission currently lacks the administrative infrastructure and expertise to adequately enforce the law. Based on an estimate of the number of pits and quarries in the state, the Commission would need between 35 to 40 years to inspect and certify pits and quarries using its existing staff of only one inspector. Additionally, the law makes the Commission responsible for developing and enforcing construction standards for barriers to “restrain the normal passage of vehicular traffic” and are “suitable for impact under normal driving conditions.” The Commission must also take into account public road drainage and right-of-way considerations in its decisions. The State gains no efficiency from having mining and reclamation experts making these types of decisions.
- Placement of the program at the Commission creates the misconception that the Commission has jurisdiction over inactive/abandoned quarries and pits in the state. Pits and quarries are generally unregulated except for nuisance concerns, such as dust and noise, which would be governed by TNRCC rules or local ordinances.

The Commission lacks the administrative infrastructure and expertise to adequately enforce the law.

Problem: A recent Attorney General’s opinion has excluded many pits from regulation.

- The Attorney General issued an opinion in December 1999, which said that anyone who has an inactive quarry or pit without an adjacent processing plant does not have to comply with the law. Commission staff indicated that 95 percent of all quarries fall into this category.¹ As a result, the Commission was forced to close 114 active cases.
- The ruling assures that the law affects only active pits, though inactive pits too close to roadways are equally dangerous. Usually, determining if inactive pits were associated with an adjacent processing plant was impossible for the Commission. Additionally, operations that involve hauling the material to an offsite processing plant create many pits.

A recent Attorney General’s opinion has excluded most pits from regulation.

Comparison: The Texas Department of Transportation has a mission more consistent with the goal of protecting the motoring public.

- TxDOT's mission is to provide safe, effective, and efficient movement of people and goods in the state. It achieves this mission through several activities including planning, designing, and managing highway construction and maintenance projects and managing operations on the state highway system including improving traffic safety.
- TxDOT maintains 25 district offices throughout the state that house staff with expertise in traffic and construction engineering who routinely evaluate the state's roads for safety and, when appropriate, contract for the construction of barriers related to naturally occurring hazards proximate to roadways. Staff in these offices are also proficient at dealing with right-of-way issues and routinely interface with local officials responsible for secondary roads not in the State's inventory.

Recommendation

Change in Statute

6.1 Transfer responsibility for administering the Aggregate Quarry and Pit Safety Act to the Texas Department of Transportation.

This recommendation would transfer responsibility for the program to an agency that has a mission more closely aligned with the safety aspects of protecting the motoring public. TxDOT has the infrastructure, though its 25 district offices, to more effectively administer the program. In addition, TxDOT currently monitors roadways and acts accordingly to protect the public from naturally occurring hazards next to roadways. Including pits and quarries in this evaluation is a natural extension. When the program does identify unsafe pits and quarries, if the remedy involves issue over TxDOT right-of-way, the agency is in a better position to resolve these issues.

6.2 Clarify that the Act applies to all pits and quarries, not just those associated with a processing plant.

This recommendation would clarify that the original law applies to all pits and quarries that adversely impact the safety of the motoring public by specifying that the State targets all unsafe pits, regardless of the proximity of a processing plant. With this recommendation, TxDOT could reassess the cases previously identified by the Commission, but closed because of the Attorney General's opinion.

Impact

The intent of this recommendation is to improve the administration of the Aggregate Quarry and Pit Safety program by transferring it to an agency with a mission more closely aligned with the intent of the Act. Transferring responsibility for the program to TxDOT will also increase inspection and enforcement resources for the program through the TxDOT district offices, using staff in those offices that evaluate the safety of the state's roadways. Additionally, by clarifying that the Act applies to all pits and quarries in the state, the State will not exclude unsafe pits from regulation on a technicality.

Fiscal Implication

The recommendations would have no net fiscal impact to the State. General Revenue funding for one FTE and associated costs, currently associated with the program, would be transferred from the Commission to TxDOT.

¹ Interview with Railroad Commission Surface Mining and Reclamation Division staff, (Austin, Texas, October 17, 2000).

Issue 7

Texas Has a Continuing Need for the Railroad Commission.

Summary

Key Recommendation

- Continue the Railroad Commission of Texas for 12 years.

Key Findings

- Texas has a continuing interest in protecting natural resources, consumer interests, and the quality of the environment.
- Although other governmental entities can perform the Commission's core functions, each has drawbacks.

Conclusion

The Railroad Commission of Texas' mission — to protect the state's natural resources, the environment, and public safety through the regulation of the oil and natural gas industry, pipeline transporters, natural gas utilities, rail safety, and surface mining operations — is important to the State. As the oil and gas industry matures, the Commission's role in plugging abandoned wells and cleaning oil field sites becomes more important. The Sunset review evaluated the continuing need for a single, independent agency to manage state and federal efforts to protect the environment and public safety, and assessed whether the agency's functions could be successfully transferred to another agency.

Support

Current Situation: The Commission is primarily responsible for regulation of the oil and gas industry in Texas.

- Through the Railroad Commission, the State has historically regulated the production and transportation of hydrocarbons to conserve resources and maximize recovery. These regulations were designed to promote oil and gas production as they protected the rights of producers and landowners.
- The Commission also plays a role in regulating gas utilities as monopoly energy providers. While primary jurisdiction for setting rates for natural gas in incorporated areas rests with municipalities, the Commission serves an appellate role when agreements cannot be reached. The Commission has the authority to set gas utility rates in unincorporated areas.
- As oil and gas production has declined, putting pressure on some producers to stay in business, the Commission has become more involved in environmental protection. The Commission is responsible for administering the Oil Field Cleanup Fund supported by industry fees and used for plugging abandoned wells and cleaning abandoned oil fields. It also seeks to enforce environmental regulations and financial security requirements to get producers and operators to maintain a clean environment.
- The Commission regulates the transportation of hydrocarbons, such as crude oil, natural gas, and liquefied gases, through more than 157,000 miles of pipelines in the state. The Commission also has safety regulatory responsibility for the more than 10,000 miles of mainline railroad track in the state.

Failing to adequately regulate hydrocarbon production would have an adverse impact on the quality of life in the state.

Need for Agency Function: Texas has a continuing interest in protecting natural resources, consumer interests, and the quality of the environment.

- Failing to adequately regulate hydrocarbon production would have an adverse impact on the quality of life in the state. Unregulated recovery can be detrimental to the natural fluid drive conditions that enhance production and can adversely impact the correlative rights of adjacent landowners. Improper drilling methods and well maintenance can allow the intrusion of oil and/or saltwater into fresh surface and groundwater.
- The Commission monitors more than 355,000 oil and gas wells and 3,400 other related facilities throughout the state. More than 85 percent of the counties in Texas currently have reported oil

production, and 74 percent have natural gas production. The changing nature of the oil and gas business contributes to the likelihood that more abandoned wells and oil field sites will need to be plugged or remediated in the future with the decline in oil production in Texas. The textbox, *Changes in Oil Production in Texas*, describes this decline since production peaked in the early 1970s. Small independent producers now outnumber major oil producers in oil production. Most small independent operators do not have the resources or expertise to adequately deal with contaminated oil fields and are more likely to abandon sites than major producers. In addition, as production continues to decrease for the remaining wells, the potential for adverse environmental impact increases with more complex secondary recovery efforts.

Changes in Oil Production in Texas

In 1972, Texas oil production level was 3.5 million barrels of oil per day, whereas production in 1999 was 1.7 million barrels per day. Although oil production has declined, the number of production wells remains the same. In 1972, Texas had 167,000 active wells. Today, 170,000 wells remain active, although nearly 80,000 produce less than 1 barrel per day.

- Since the inception of the Oil Field Cleanup Fund in 1991, the Commission has used the Fund to plug more than 12,800 abandoned wells and cleaned up 1,542 abandoned sites. With more than 100,000 inactive wells and more than 2,400 oil field sites, both abandoned and active, awaiting either state funding for cleanup or staff technical assistance for private remediation, much remains to be done. These remediation efforts are particularly critical given the State's priorities for protecting ground and surface water.
- Texas has more than 280,000 miles of pipelines within the state, 157,000 of which are under the Commission's direct jurisdiction. Pipeline safety continues to be an issue with the occurrence of several recent high-profile accidents. In September 2000, one person was killed from an explosion related to a ruptured gas line that a third-party contractor damaged when the operators of the pipeline failed to mark its location. In addition, in August 2000, an interstate natural gas transmission line ignited in New Mexico resulting in 11 fatalities. The operator had not tested the line in its entirety since construction in 1950 and internal corrosion may have been a factor in the accident.
- Since Texas has more miles of railroad track than any state in the nation, rail safety continues to be an issue. A recent report by the Commission notes that much of the track inspected owned by the state's largest carrier is in "less than favorable condition" and some of the identified sections of track are those that handle high volumes of hazardous or toxic cargo. In addition, recent figures show highway-rail crossing collisions in Texas increased 13 percent in 1999, for the first time since 1994. Texas leads the nation in the number of collisions.
- The state has a total of 299 natural gas utilities delivering natural gas to households in cities and unincorporated areas. Since these entities

typically operate as monopolies, state regulation ensures utilities charge consumers a fair rate for services, companies maintain adequate customer service standards, and local delivery systems are operated safely.

Need for Agency Structure: Although other governmental entities can perform the Commission's core functions, each has drawbacks.

Although other governmental entities can perform the Commission's core functions, each has drawbacks.

- As the oil and gas production industry has matured, the focus of the agency has turned more to natural resources protection with the creation of the Oil Field Cleanup Fund in 1991. Although the Texas Natural Resource Conservation Commission (TNRCC) is the state's primary environmental regulatory agency, most environmental regulatory responsibilities related to oil and gas production have historically been assigned to the Commission, based on its initial responsibilities related to conservation and safety. TNRCC does not have experience regulating oil and gas activities. In fact, oil and gas production and its associated wastes are exempted from the federal Resource Conservation and Recovery Act, which largely guides TNRCC's waste regulations in Texas.
- The organizational structure for administering environmental laws in Texas has continued to evolve with TNRCC serving as the most comprehensive environmental regulatory agency. Despite the advantages of consolidating activities into a single agency, the structure can cause this agency to administer several programs that are not directly related to its core mission, without improving effectiveness or efficiency. Concerns have been raised that TNRCC is too big and that it lacks focus on the most important duties.
- Although regulation of utilities is currently split between RRC and the Public Utility Commission (PUC), the timing of combining these functions is problematic because of electricity deregulation. Although many regulated companies are combined utilities offering gas, electricity, and telecommunications services, the recently adopted electricity deregulation will limit the rate-setting responsibilities of PUC. As a result, PUC is currently working to implement its new customer protection responsibilities under deregulation, which will not be fully implemented until 2001. This issue can be revisited again in 2005, during the Sunset review of PUC.
- The State could have federal agencies such as the Federal Railroad Administration, Federal Energy Regulatory Commission, and Department of Interior administer federal requirements for rail and pipeline safety and surface mining. However, this relationship would pre-empt Texas' local control over these programs and would dilute the State's ability to design state-specific solutions to its problems. This option would also jeopardize federal funding currently received to administer the mandated programs.

Recommendation

Change in Statute _____

7.1 Continue the Railroad Commission of Texas for 12 years.

Impact _____

This recommendation would continue the Railroad Commission of Texas as an independent agency, responsible for protecting the state's natural resources, the environment, and public safety through the regulation of the oil and natural gas industry, pipeline transporters, natural gas utilities, rail safety, and surface mining operations.

Fiscal Implication _____

If the Legislature continues the current functions of RRC, the agency's annual appropriation of \$52.3 million would continue to be required for the operation of the agency.

ACROSS-THE-BOARD RECOMMENDATIONS

Railroad Commission of Texas	
Recommendations	Across-the-Board Provisions
	A. GENERAL
Not Applicable	1. Require at least one-third public membership on state agency policymaking bodies.
Update ¹	2. Require specific provisions relating to conflicts of interest.
Not Applicable	3. Require that appointment to the policymaking body be made without regard to the appointee's race, color, disability, sex, religion, age, or national origin.
Not Applicable	4. Provide for the Governor to designate the presiding officer of a state agency's policymaking body.
Not Applicable	5. Specify grounds for removal of a member of the policymaking body.
Update	6. Require that information on standards of conduct be provided to members of policymaking bodies and agency employees.
Not Applicable	7. Require training for members of policymaking bodies.
Apply	8. Require the agency's policymaking body to develop and implement policies that clearly separate the functions of the policymaking body and the agency staff.
Apply	9. Provide for public testimony at meetings of the policymaking body.
Update	10. Require information to be maintained on complaints.
Apply	11. Require development of an equal employment opportunity policy.
Apply	12. Require information and training on the State Employee Incentive Program.

Railroad Commission of Texas	
Recommendations	Across-the-Board Provisions
	B. LICENSING²
Apply ³	1. Require standard time frames for licensees who are delinquent in renewal of licenses.
Apply ⁴	2. Provide for notice to a person taking an examination of the results of the examination within a reasonable time of the testing date.
Apply ⁵	3. Authorize agencies to establish a procedure for licensing applicants who hold a license issued by another state.
Apply	4. Authorize agencies to issue provisional licenses to license applicants who hold a current license in another state.
Already in Statute	5. Authorize the staggered renewal of licenses.
Apply	6. Authorize agencies to use a full range of penalties.
Apply ⁶	7. Revise restrictive rules or statutes to allow advertising and competitive bidding practices that are not deceptive or misleading.
Apply	8. Require the policymaking body to adopt a system of continuing education.

¹ Update current law applicable to Commission employees, but not to elected members.

² These recommendations were evaluated for licensing, certification, or registration of liquefied petroleum gas (LPG), compressed natural gas (CNG), and liquefied natural gas (LNG) activities under Texas Natural Resources Code, chapters 113 and 116.

³ Update existing language for LPG activities, and apply to CNG and LNG activities.

⁴ Update existing language for LPG activities, and apply to CNG and LNG activities.

⁵ Apply endorsement language to CNG and LNG activities.

⁶ Update existing language for LPG activities, and apply to CNG and LNG activities.

AGENCY INFORMATION

Agency Information

AGENCY AT A GLANCE

The Railroad Commission of Texas (RRC) protects the state's natural resources, the environment, and public safety through the regulation of the oil and natural gas industry, pipeline transporters, natural gas utilities, rail safety, and surface mining operations. In 1891, the Legislature, under constitutional authority, established the Commission with jurisdiction over rates and operations of railroads, terminals, wharves, and express companies, providing the basis for the agency's name.

The agency's major functions fall into the following categories.

- Assuring that the state's fossil fuel energy production, storage, and delivery is conducted to reduce harmful effects on the environment and to preserve natural resources. Activities include:
 - regulating all aspects of oil and gas exploration and production;
 - managing pollution prevention programs related to oil and gas production, including well plugging and site remediation; and
 - regulating coal and uranium surface mining.
- Advancing safety in the delivery and use of the state's petroleum energy products and in the operation of the state's rail system. Activities include:
 - enforcing state and federal intrastate pipeline safety regulations;
 - regulating the liquefied petroleum gas (LPG), compressed natural gas (CNG), and liquefied natural gas (LNG) industries;
 - inspecting and enforcing state and federal rail safety regulations, including railroad crossing safety education; and
 - protecting the motoring public from safety hazards associated with aggregate quarries and pits.
- Providing equal and fair energy access, ensuring fair gas utility rates, and promoting research and education on use of alternative fuels. Activities include:
 - protecting correlative rights and preventing waste of oil and gas resources;
 - regulating gas utilities, including setting and auditing rates for gas utility services; and

**The Legislature
created the Railroad
Commission in 1891.**

- supporting education and research into promoting the use of propane as an alternative fuel in the state.

Key Facts

- **Funding.** The Commission’s budget for FY 2000 was approximately \$52.3 million. General Revenue comprises \$24.8 million, or 47 percent of the agency’s budget. Other revenue sources include the Oil Field Cleanup Fund of \$14.7 million, or 28 percent, and federal funds of \$7.3 million, or 14 percent.
- **Staffing.** The Commission has approximately 786 employees, with 516 people working at the agency’s headquarters in Austin. Two hundred and seventy people work in the agency’s 15 regional and district offices.
- **Oversight.** Three statewide elected officials govern the Commission, who serve staggered six-year terms. When a vacancy occurs, the Governor appoints a new member to serve until the next general election. The Commissioners elect their Chair.
- **Resource Allocation.** Approximately 68 percent of the agency’s staffing resources (direct and indirect) are allocated for oil and natural gas production regulation, 17 percent to pipeline, LPG, CNG, LNG, and natural gas utilities regulation, 4 percent to promote LP-Gas usage, 8 percent to coal and uranium mining regulation, and the remaining 3 percent to rail industry regulation.
- **Workload.** RRC monitors more than 355,000 oil and gas wells and 3,400 related facilities throughout the state. Over 85 percent of the counties in Texas currently have reported oil production and 74 percent have natural gas production. RRC has used the Oil Field Cleanup Fund to plug more than 16,500 abandoned wells. Texas currently has more than 100,000 inactive wells. Texas has more than 280,000 miles of pipelines within the state, 157,000 of which are under the Commission’s direct jurisdiction. RRC oversees 21 permits to mine coal in Texas, covering 16 active mines with more than 255,000 acres of permitted coal mining operation. The state has one uranium surface mine currently in final reclamation. Texas has 10,713 miles of mainline railroad track, the most of any state in the nation.

Most of the agency’s resources are aimed at regulation of oil and gas production.

MAJOR EVENTS IN AGENCY HISTORY

The Railroad Commission of Texas was established in 1891 under constitutional authority and legislative mandate to prevent discrimination in railroad charges and establish reasonable tariffs. The Texas Constitution did not establish the Commission, but authorized the Legislature to do so. It was originally created with an appointed governing body but was

subsequently changed to an elected body. The textbox, *Constitutional Provisions Related to the Railroad Commission of Texas*, details the Commission’s constitutional underpinnings.

In 1917, the Legislature declared pipelines to be common carriers and gave the Commission jurisdiction over their operation. This was the first act to designate the Commission as the agency with regulatory authority over oil and gas production and laid the foundation for subsequent mandates in 1919 to administer the conservation laws relating to oil and gas production. With the discovery of the larger oil and gas fields in the state in the 1930s, RRC increased its regulatory oversight to include economic regulation of production based on market demand. During the 1930’s, additional regulations were also enacted to conserve natural resources and protect the rights of adjacent mineral interest owners. As the oil and gas production industry has matured, the focus of the agency has turned more to natural resources protection with the creation of the Oil Field Cleanup Fund in 1991. Although the Texas Natural Resources Conservation Commission (TNRCC) is the state’s primary environmental regulatory agency, most environmental regulatory responsibilities related to oil and gas production have historically been assigned to RRC, based on its initial responsibilities related to conservation and safety. In addition, oil and gas production and its associated wastes are exempted from the federal Resource Conservation and Recovery Act, which is TNRCC’s responsibility in Texas.

During the 1920’s, the Legislature gave RRC additional regulatory responsibility over motor carriers and natural gas utility companies. From 1950 to 1980, safety authority over LP-Gas products was delegated to the Commission, and it assumed authority over surface coal and uranium mining operations and federal pipeline safety standards. In 1994, the Legislature deregulated the motor carrier industry and transferred the Commission’s remaining motor carrier responsibilities to the Texas Department of Transportation. A chronological listing of significant Commission events is included in *Appendix A*.

ORGANIZATION

Policy Body

The Texas Constitution specifies that three statewide elected officials head the Railroad Commission, serving staggered six-year terms. When a vacancy occurs, the Governor appoints a new member to serve until the next general election. Commissioners elect their Chair. The Commission meets approximately twice a month to render decisions in contested cases,

**Constitutional Provisions
Related to the Railroad
Commission of Texas**

Art. X, §2 of the Texas Constitution amended to provide for the Railroad Commission, stating the “Legislature...may provide and establish all requisite means and agencies invested with such powers as may be deemed adequate and advisable (to regulate Railroads).”

Adopted at November 4, 1890 election; Proclamation of December 19, 1890.

Art. XVI, §30 of the Texas Constitution amended to provide for elective six-year overlapping terms for Railroad Commissioners.

Adopted at November 6, 1894, election; Proclamation of December 21, 1894.

The Texas
Constitution specifies
that three statewide
elected officials head
the Railroad
Commission.

adopt rules, and conduct other agency business. In fiscal year 2000, the Commission met 25 times.

The Natural Resources Code sets out the general authority of the Commission, with additional duties specified in the Water and Utility Codes. The Commissioners are responsible for regulating all aspects of the oil and gas industry in Texas, including pipelines and gas utilities. In addition, the Commissioners have regulatory oversight of coal and uranium surface mining and responsibilities for rail safety.

Member	Term
Michael L. Williams, Chair	1992-2002 Appointed by Governor, Elected in 2000
Tony Garza	1999-2004 Elected in 1998
Charles Matthews	1995-2000 Re-elected in 2000

Staff

In FY 2000, the Commission had 786 employees.

In fiscal year 2000, the Commission had a staff of 786 employees, with 516 working at the agency's headquarters in Austin. The remaining 270 work in the agency's 15 regional and district offices, with the greatest number of employees located in and around high-density oil and gas producing areas, such as Midland, Houston and Kilgore. Most of these employees are field inspectors who report to the Oil and Gas Division. The chart, *Railroad Commission Regions*, details each regional location and the number of employees assigned to the office. A map of the regional boundaries is included in *Appendix B*.

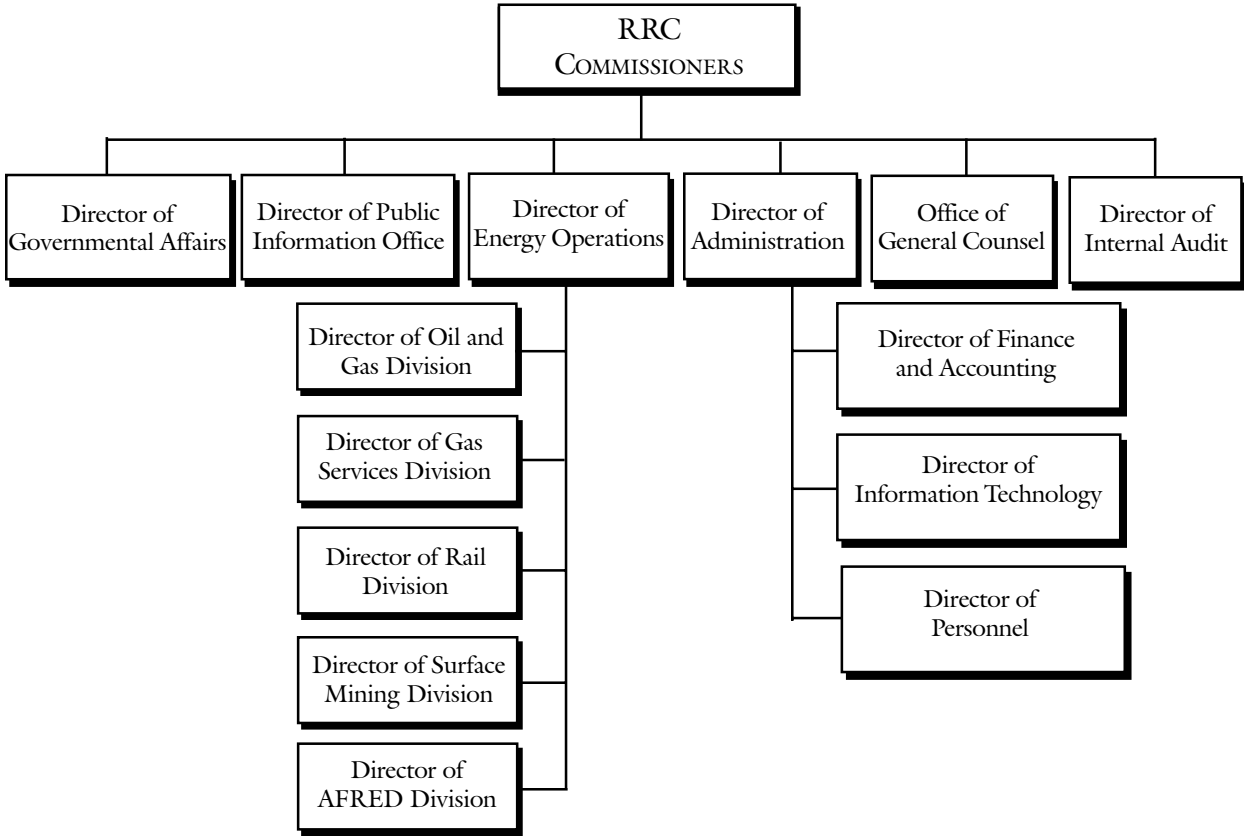
Railroad Commission Regions		
Headquarters, District or Field Office	Location	Number of Employees - FY 2000
Headquarters	Austin	516
Districts 1 and 2	San Antonio	24
District 3	Houston	36
District 4	Corpus Christi	23
District 5	Garland	10
District 6	Kilgore	34
District 7B	Abilene	24
District 7C	San Angelo	14
District 8 and 8A	Midland	38
District 9	Wichita Falls	23
District 10	Amarillo/Pampa	22
Surface Mining Field Office	Floresville	4
Surface Mining Field Office	Tyler	6
Alternative Fuels Field Office	Sweetwater	1
Alternative Fuels Field Office	El Paso	1
Outriders	Various	10

In September 1999, the Commission restructured the agency, eliminating the Executive Director’s position and consolidating the agency’s core activities relating to oil and gas, gas services, surface mining, rail and alternative fuels research and education under a new Director of Energy Operations position. The direct program support functions of finance, information technology and personnel were consolidated under a new Director of Finance and Administration position. The Directors of Energy Operations, Finance and Administration, Intergovernmental Affairs, Public Information, Internal Audit and the General Counsel, each report directly to the Commission. See *Railroad Commission Organizational Chart*.

In 1999, the Commission eliminated the Executive Director position and consolidated core activities under a Director of Energy Operations.

A comparison of the agency’s workforce composition to the minority civilian labor force over the past four years is shown in Appendix B, *Equal Opportunity Employment Statistics – Fiscal Years 1996 - 999*. The agency lags significantly behind civilian labor force levels for African-American workforce percentages and generally meets most Female and Hispanic civilian labor force levels.

Railroad Commission of Texas Organizational Chart

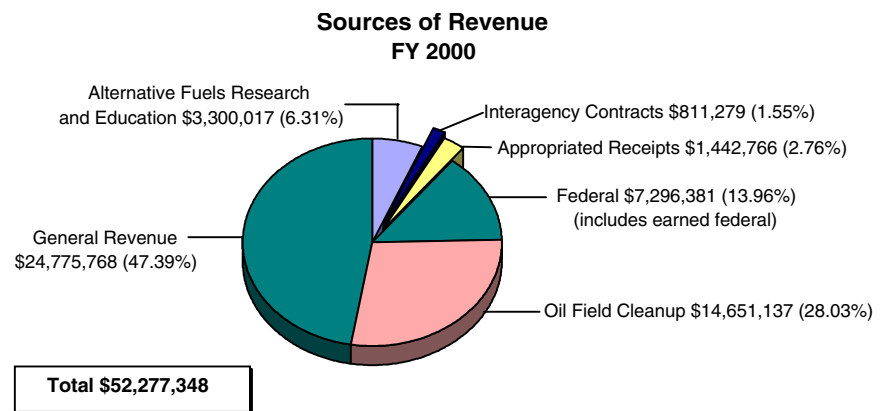


FUNDING

Revenues

In FY 2000, the Commission operated on revenues of \$52.3 million.

In fiscal year 2000, the Commission operated on revenues of approximately \$52.3 million. The chart, *Sources of Revenue – FY 2000*, shows the Commission’s revenues by source. The Commission is funded approximately 50 percent through General Revenue. Federal funds account for 14 percent of the Commission’s budget. The agency receives federal funds for different agency responsibilities, including pipeline safety, underground injection wells, surface mining, and abandoned mine land reclamation. Grants from federal agencies come from the Department of Energy, the Environmental Protection Agency, and the Department of the Interior.



The Commission administers 21 fees relating to regulation, licensing and other services, which are major sources of revenues for two funds.

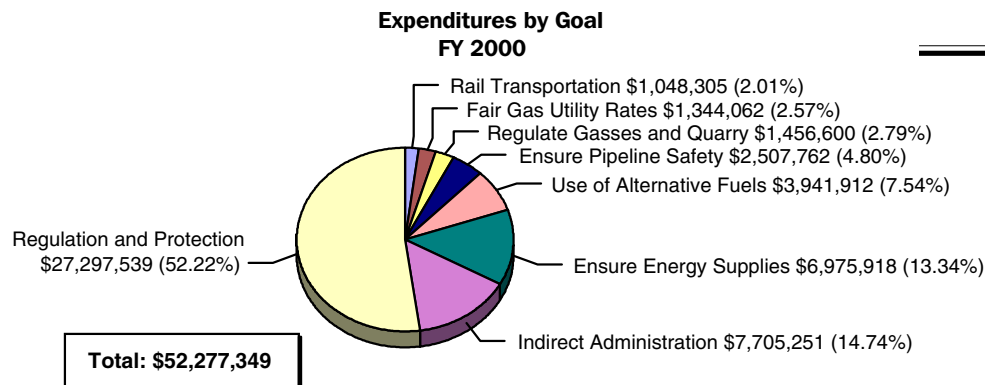
Oil Field Cleanup Fund - Key Facts FY 2000
<ul style="list-style-type: none"> • \$14.6 M in revenues • Fund balance of less than \$1 M in FY 2001 <p>The fund is supported by oil and gas, industry fees, including:</p> <ul style="list-style-type: none"> • Oil: 5/16 of one cent per barrel, • Gas 1/30 of one cent per 1,000 cubic feet, • Drilling permit and extension fees: \$50 to \$200, • Bond fee rate: \$100 or 3 percent of bond, • Oil and gas violation fees, • Sales of abandoned well equipment, and • Misc. waste disposal and certification fees.

These two funds provide 34 percent of the Commission’s budget, with 28 percent coming from the Oil Field Cleanup Fund, and 6 percent coming from the Alternative Fuels and Research Education (AFRED) Fund for fiscal year 2000. For more information on the Oil Field Cleanup Fund, see the textbox, *Oil Field Cleanup Fund - Key Facts – FY 2000*. The AFRED fund is paid by a fee on odorized propane gas. It is dedicated to promoting propane usage and providing rebates to customers that convert appliances, vehicles, and other equipment to propane fuel. One major component of appropriated receipts, copying fees for agency data, is declining as more customers use the Internet.

Expenditures

The Commission spent approximately \$52.3 million in fiscal year 2000. The pie chart, *Expenditures by Goal – FY 2000*, provides a proportional snapshot of expenditures. Pollution prevention and remediation activities, such as plugging abandoned wells, represented the largest portion of the agency’s expenditures at 52 percent.

Pollution prevention and well plugging represent more than 50 percent of the agency’s expenditures.



The table, *Operating Budget by Strategy — FY 2000*, shows how the agency spent its funds on specific activities.

Operating Budget by Strategy FY 2000		
Strategy Number	Strategy Name	Budget Amount
01-01-01	Prevent Pollution	\$8,585,128
01-01-02	Well Plugging and Site Cleanup	13,208,316
01-02-01	Coal and Uranium Regulation	2,475,205
01-02-02	Reclaim Abandoned Mines	3,028,890
02-01-01	Enforce Oil and Gas Laws	5,057,214
02-01-02	Energy Information Database	1,918,704
03-01-01	Rail Safety	1,048,305
04-01-01	Gas utility Compliance	1,344,062
05-01-01	Increase LP Gas Usage	3,941,912
06-01-01	Reduce Pipeline Accidents	2,507,762
07-01-01	Regulate LPG/CNG/LNG	1,407,292
07-02-01	Pit Safety certification	49,308
Indirect	Central Administration	3,327,552
Indirect	Information Technology	4,377,699
Total		52,277,349

AGENCY OPERATIONS

Five divisions contribute to the agency's core activities, called Energy Operations. These divisions are Oil and Gas, Gas Services, Surface Mining, Rail, and Alternative Fuels Research and Education. By far the two largest of these divisions, accounting for the agency's primary functions, are the Oil and Gas Division and the Gas Services Division.

OIL AND GAS DIVISION

The Oil and Gas Division is the largest in the Railroad Commission.

The Oil and Gas Division regulates the exploration, production, and transportation of oil and natural gas in Texas. The division is the largest in the Railroad Commission, consisting of 395 employees. Approximately 198 employees work in the Austin Headquarters, while 197 field staff operate out of the division's nine regional offices. The division's annual operating budget for fiscal year 2000 was approximately \$27 million, funded primarily by state General Revenue and the Oil Field Cleanup Fund.

The division is responsible for preventing waste of the state's oil and gas, protecting the rights of mineral and surface owners, and protecting the environment and public safety. Division staff work to achieve these goals through several programs, all of which fall within one of three areas of activity: oil and gas permitting, compliance, and well plugging/site remediation.

Oil and Gas Permitting

The Commission has permitted almost 8,000 oil and gas organizations.

The Railroad Commission has registered and licensed almost 8,000 oil and gas industry related organizations. In Texas, oil and gas producers interested in drilling a well must apply for a drilling permit and provide proof of financial assurance that resources exist to properly plug the well once production ceases. Acceptable forms of financial assurance include a bond, a letter of credit, an established fee, or an extension permit. In approving a drilling permit, the Commission considers the spacing and density of wells for the oil or gas reservoir in question. Upon permit approval, production is monitored to assure that correlative rights are protected.

The Commission is responsible for protecting correlative rights. It determines how much oil or gas an operator can produce from a well within a certain period in proportion to the other operators extracting oil or gas from the same reservoir. By allocating production, the Commission protects both the interest of each individual producer and the State's interest in protecting the resource and preventing its waste.

Producers with active wells file monthly reports, which the Commission reviews for adherence to allowed production rates, well performance and the impact on adjacent wells. Throughout a well's active life, the Commission requires information from the producer on production levels, transportation tracking and well drilling technical data. It also reviews and certifies wells that qualify for tax exemptions and incentives.

Upon a well's depletion of oil or gas, the Commission requires plugging the well with cement, but allows producers to file permit extensions if the producer wants to preserve the well for future production, or cannot afford the cost of plugging. The number of documented inactive wells has increased from 64,000 in 1990, to nearly 102,000 in 2000.

Some wells are used as injection wells, either to dispose of waste related to oil and gas production (most commonly salt water) or to enhance recovery of oil or gas. The Commission's **Underground Injection Control Program** protects ground water contamination from injection well failures or mismanagement. The Environmental Protection Agency reviews this program every two years. The Commission regulates approximately 52,000 injection wells with active permits in Texas. Approximately 10,000 injection wells are shut-in and abandoned.

To accommodate the fluctuations of the oil and gas market, hydrocarbons are often stored underground in salt dome caverns or depleted reservoirs. The Commission regulates this activity to protect groundwater and assure safe operation through its **Underground Hydrocarbon Storage Program**.

The **Brine Mining Program** addresses proper handling of a byproduct resulting from the industry's use of salt domes for storage of hydrocarbons. When producers use salt domes as storage facilities, they must first flush the dome with fresh water to create a cavity. The byproduct of this process is brine. The regulatory program focuses on the proper containment of the brine on the surface until it is reinjected into the cavern to displace the hydrocarbons.

The Commission regulates the handling of drilling mud, used as a lubricant to facilitate drilling, through its Surface Storage and Disposal Program by issuing permits for temporary storage pits near the drilling site, transportation, and land farming of this waste.

The **Hazardous Oil and Gas Waste Program** regulates the disposal of toxic oil sludge, and contaminated soil and water. During the drilling process residual sludge from oil collects in pipes and storage tanks. Producers transport this sludge to a permitted reclamation facility that

The Commission
requires depleted
wells to be plugged
with cement.

Hydrocarbons are
stored in underground
salt dome caverns or
depleted reservoirs.

extracts crude oil from the sludge. The Commission regulates the transportation of this sludge, and the reclamation facilities, to ensure compliance with state and federal public health and environmental safety laws. Gas pipeline transmission waste, including contaminated solids and water used to pressure test pipelines, can also be hazardous.

The Commission recognizes the need to educate oil and gas producers to adopt best management practices, which reduce the generation of hazardous waste. The Waste Minimization Program provides software, workshops, presentations, site audits, and research material to producers interested in decreasing the waste generated from drilling and production. This program allows voluntary participation and is funded through a grant from EPA.

Compliance

Field staff inspect drilling rigs, leases, storage facilities and plants, respond to complaints, and report on potential pollution violations. They also witness placement of surface casing in wells, oversee well plugging, and conduct mechanical integrity testing of wells. In cases of a severe violation, these inspectors have the authority to shut-off pipelines, seal wells, and revoke permits. In fiscal year 1998, field staff performed 105,600 inspections, resulting in the issuance of 110,207 violation notices.

Railroad Commission Inspection Activities in 1998

105,600	routine inspections
7,700	complaint related inspections
14,000	UIC and MIT well inspections
7,200	operator well plugging inspections
1,300	state-funded well pluggings
3,000	drilling rig inspections
800	well production tests
1,400	surface casings

When an inspector finds a violation, a verbal or written notice is issued and the producer is given a time frame for correction. If the producer fails to comply, the district office issues a formal written notice. If an inspector is unable to achieve compliance, the matter is referred to the Commission's General Counsel, which will in turn issue a formal administrative complaint for enforcement action.

Well Plugging and Site Remediation

In 1991, the Legislature created the Oil Field Cleanup Program to plug abandoned wells and clean up abandoned pollution sites. The oil and gas industry funds the Commission's cleanup activities, including revenue from permit drilling fees, oil and gas production fees, financial assurance, and sales of salvageable equipment from abandoned sites.

Reviewing the state's 25,000 non-compliant wells to determine whether they need to be plugged is a major focus of the Commission's efforts. In 2000, the Commission plugged 1,335 wells at an average cost of under \$4,000 per well. If the agency can successfully identify the operator, then he is required to pay the cost of plugging plus an

administrative penalty ranging from \$1,000 to \$3,000. Penalties are deposited in the fund. In fiscal year 2000, \$7.1 million from penalties was deposited in the fund, including \$6 million from one settlement.

Abandoned oilfield sites are identified through citizen complaints or through routine lease inspections conducted by field staff. The Commission's cleanup staff uses risk assessment to identify sites that pose the greatest environmental and public health safety threats. In fiscal year 2000, staff reviewed and monitored approximately 500 operator cleanup efforts, and contracted for another 233 state-funded cleanups of abandoned sites.

GAS SERVICES DIVISION

The Gas Services Division has 102 full time employees and is responsible for ensuring safe transport of gas and hazardous liquids, mainly through pipelines, and regulating natural gas utilities. The Regulatory Analysis and Policy Section and the Audit Section have 22 full-time employees supporting the economic regulation of utilities by reviewing natural gas rates and ensuring utilities meet reporting requirements. The Pipeline and Liquefied Petroleum Gas (propane) Safety Section has 76 full time employees providing support for safety through regulation of pipelines and propane products. The division's remaining four full time employees include the director and administrative staff.

Pipeline Safety

The Commission is responsible for protecting the public and the environment by regulating pipelines that transport natural gas and hazardous liquids. Pipelines regulated by the Commission include natural gas distribution lines, transmission lines, and urban gathering lines. In addition, agency staff inspect pipelines carrying crude oil, refined petroleum products, and carbon dioxide. The Commission permits pipeline operators to find the location of pipelines, and to decide if the pipelines qualify as a utility under commission rules. Texas has 1,400 operators of 7,000 pipeline systems.

Of the 280,000 miles of natural gas and hazardous liquid pipelines in Texas, the Commission has direct jurisdiction over more than 157,000 miles of intrastate pipelines. Approximately 43,000 miles of pipeline are classified as "rural gathering lines," which may or may not be subject to Commission regulations based on certain environmental or safety conditions. The Commission does not have authority over more than 80,000 miles of federally-controlled interstate pipeline.

In 1991, the Legislature created the Oil Field Cleanup Program, supported by industry fees, to plug abandoned wells and clean abandoned sites.

The Commission is responsible for protecting the public and the environment by regulating pipelines that transport natural gas and hazardous liquids.

Under a federally delegated program, the Commission enforces both state and federal regulations for intrastate natural gas and hazardous liquids pipelines, and promotes public awareness of pipeline safety. The chart, *Natural Gas and Hazardous Liquid Pipelines in Texas*, shows the different types of natural gas pipelines, and the number of miles of these pipelines, in Texas.

Natural Gas and Hazardous Liquid Pipelines in Texas		
Type	Definition	Miles
Interstate Transmission	Transports gas and hazardous liquids to distribution centers, storage facilities or large volume customers. Pipelines extended beyond state boundaries.	80,000
Intrastate Gas Transmission	Transports gas to distribution centers, storage facilities or large volume customers. Pipelines remain in Texas under Commission authority.	37,700
Intrastate Hazardous Liquids	Transports crude oil and refined products within the state.	38,700
State Offshore	Originates in coastal bays and extends up to 10.3 miles to sea, where federal jurisdiction begins.	1,300
Urban Gathering	Transports gas from producing wells to transmission lines, and are located in cities or commercial areas.	4,300
Rural Gathering	Transports gas from producing wells to transmission lines, and are located outside cities or commercial areas.	43,000*
Distribution	Supplies residential and small commercial users as branch lines.	70,500
Master Meter	Distributes natural gas for resale in areas such as apartment complexes or mobile home parks.	4,659

*Railroad Commission estimate, includes natural gas and hazardous liquids.

Texas Pipeline Accidents 1989 to 1998	
Property Damage	\$47 Million
Major Accidents	251
Fatalities	22
Injuries	175

The chart, *Texas Pipeline Accidents - 1989 to 1998*, shows major natural gas and hazardous liquid accidents in the state over the past nine years. In addition, each year approximately 300, less serious, reportable pipeline incidents occur, such as damage by a construction crews.

The agency averages about 2,500 pipeline safety evaluations a year, resulting in approximately 5,000 cited violations, of which about 15 are referred to legal staff for enforcement. Typical safety violations include excessive pipeline pressure, lack of cathodic protection, missing line markers, and lack of odorization in natural gas. In fiscal year 2000, the agency performed 2,947 pipeline inspections resulting in \$28,750 in legal enforcement penalties from five pipeline operators.

Natural Gas Products

The Commission also regulates natural gas products such as propane, compressed natural gas, and liquefied natural gas. Efforts include licensing people who deliver these products, providing training on safe handling and transportation, and inspecting storage and distribution facilities. The Commission does not regulate the transport of propane by rail or to marine terminals. The regulation of compressed natural gas safety begins at the point where the gas is compressed, and liquefied natural gas is fully regulated except the liquefaction process. A rider to the Commission's 2000 - 2001 appropriation requires the agency to adjust regulatory fee levels to recover the cost of regulation. With fee levels currently set at the statutory maximum, the agency is projecting a \$400,000 shortfall in the amount necessary to recover the associated regulatory costs in the current biennium.

The Commission regulates natural gas products such as propane, compressed natural gas, and liquefied natural gas.

Gas Utilities and Rate Setting

The Commission is responsible for economic regulation and policy development relating to natural gas to ensure the state has a fair gas utility rate structure that is accountable to rate payers. The Commission's main utility oversight function is evaluating rate changes through quasi-judicial hearings. Agency staff serve as technical examiners and expert witnesses in Commission hearings. The Commission has direct jurisdiction over rates outside a city and transport rates up to the city limit. The city has jurisdiction over rates within the city, but utilities can appeal city decisions to the Commission. The textbox, *Steps in a Natural Gas Utility Rate Case*, outlines the basic steps in an appeal case. The Commission maintains natural gas utility filings and tariffs to ensure compliance with approved rates and to help customers determine if utilities are providing fair pipeline access.

Steps in a Natural Gas Utility Rate Case
<ul style="list-style-type: none"> • A utility files an intent to increase rates with a city. • The city holds a hearing to accept or reject the rate change. • If the city rejects the increase, the utility may file an appeal with the Commission. • The Commission holds a hearing, and issues a final order within 185 days. • The parties may file for a rehearing. • If unsatisfied with the Commission's final decision, the parties may appeal to the Courts.

The Commission determines if natural gas pipelines are utilities, subject to requirements to provide fair access and charge approved transmission rates. To qualify as a utility, a business must transport natural gas for public use for monetary compensation, and/or have used eminent domain at any time in the past to acquire a right of way. A business may be excluded from utility status by filing a certificate with the Commission claiming certain exemptions.

Texas has a total of 299 natural gas utilities, of which 161 pay a utility tax. Each year audit staff screen approximately 650 natural gas pipeline permits to decide if they should be deemed a utility. Staff also help ensure that utilities are correctly billing approved rates to customers,

The primary function of the Rail Division is to conduct safety inspections of railroad operations.

accurately reporting regulatory information, and making proper gas utility tax payments. In fiscal year 2000, audit staff reviewed 122 gas utilities.

RAIL DIVISION

The Rail Division primarily functions to augment the Federal Railroad Administration rail safety program employing safety inspectors to check equipment, railroad operations, hazardous materials handling, signal operation, and track in Texas. The Division includes a section devoted to grade crossing safety education.

The Division has 20 staff, with administrative staff, in Austin, and inspectors assigned to headquarters across the state in areas of dense railroad activity to allow comprehensive inspection coverage and quick accident and complaint response time. The Division's annual operating budget is approximately \$1 million funded by state General Revenue.

Rail Safety

In 1983, the Legislature authorized the Commission to start a railroad safety program with the Federal Railroad Administration to enforce state and federal safety standards. Federal standards focus on railroad track, equipment, operating practices, signals and train control, and hazardous materials. Safety inspectors also conduct and report on accident and complaint investigations. Texas has 10,713 miles of mainline track, the most of any state in the nation.

Grade Crossing Safety Education and Regulation

The Commission supports the grade crossing safety program known as "Operation Lifesaver." The program's mission is to prevent and reduce crashes and fatalities at highway-rail grade crossings. Rail safety inspectors and other Division employees deliver the program to schools, driver education classes, community groups, industry audiences, and school bus and other professional drivers.

Grade Crossing Safety Regulation also targets highway-railroad grade crossing safety by prescribing that railroad rights-of-way be cleared of vegetation and unnecessary signs for a distance of 250 feet from the centerline of the crossing, eliminating obstructions to a motorist's view of approaching trains. The enforcement applies to crossings that automatic signals do not control.

SURFACE MINING AND RECLAMATION DIVISION

The Division administers four programs to regulate surface mining and protect the public from dangers associated with open-pit quarries near roadways.

The Surface Mining and Reclamation Division's fiscal year 2000 budget was approximately \$5.2 million, with federal dollars accounting for approximately 80 percent of these funds. The Division has 54 employees. The two primary programs operated within the Division, accounting for 98 percent of its budget, are the coal mining regulatory program and the abandoned mine land reclamation program.

Coal Mining Regulatory Program

Funded by a 50/50 mix of state funds and federal cost share, the Coal Mining Regulatory Program assures that reclamation to pre-mining levels of productivity is planned and executed in all surface coal mining operations in the state. Mine operators are required to post a bond and file a reclamation plan before commencing mining operations. Staff oversee the mining operation from digging through reclamation, an average of 10-15 years from beginning to end. Typically, an entire mined area providing fuel to nearby power plants may operate for 30 to 40 years. Upon completion, the Commission certifies that the former mine site has been restored to pre-mine conditions.

The Coal Mining
Regulatory Program
assures mines are
returned to pre-
mining levels of
productivity.

This program is required by federal law. If the State does not have an approved coal mining regulatory program, the U.S. Department of the Interior would regulate surface mining operations in the state.

Abandoned Mine Land Reclamation Program

Only available to states with federally approved coal mining regulatory programs, federal funds derived from fees on coal mining within the state pay 100 percent of the costs of this reclamation program. Lands mined and abandoned before federal surface mining regulations took effect in 1977 are eligible for reclamation with these funds. Abandoned mines are identified by landowners or from state records. The program only undertakes reclamation with the permission of the current property owner.

The federal government required that the abandoned mine land program must first reclaim abandoned coal mines, and then use the funds to reclaim other abandoned sites. Texas has completed reclaiming its abandoned coal mines and funds are now being used to reclaim abandoned uranium pit and hard-rock shaft mines.

Market forces have caused all uranium surface mining in Texas to cease.

Uranium Mine Regulatory Program

This state-funded program was responsible for regulating and overseeing exploration for uranium and reclamation of uranium pit mines. Market forces have caused all uranium surface mining in Texas to cease. The uranium mine regulatory program retains one-third of an FTE to oversee any remaining exploration and one site still undergoing reclamation.

Aggregate Quarry & Pit Safety

One staff person is responsible for ensuring that certain active and inactive quarries within 200 feet of a public roadway have adequate guardrails and barricades. With only one inspector, between 35 and 40 years will be required to inspect and certify all existing pits and quarries in the state.

ALTERNATIVE FUELS RESEARCH AND EDUCATION DIVISION (AFRED)

AFRED's goal is to promote the propane industry in Texas.

The Alternative Fuels Research and Education Division's goal is to promote the propane industry in Texas. The division has 21 full-time employees performing the following functions:

- conducting research on propane usage;
- providing training and exams for propane industry employees;
- administering consumer rebates for propane conversions; and
- conducting marketing activities and public education.

AFRED is funded by a fee on odorized propane, which generates approximately \$2 million per year. The fee is dedicated and equally funds the consumer rebate program and other research, educational, and promotional activities, with a small percentage going to propane regulatory activities. The AFRED fee is assessed on approximately 10 percent of total propane production sold as fuel at 1,200 locations statewide. No fee is assessed on the other 90 percent of propane that is used for industrial processes. AFRED also pursues grants from the federal Department of Energy, such as conversion of school bus fleets to propane; and contracts with the State Energy Conservation Office for energy conservation related projects, such as alternative fuel educational materials.

AFRED consults with a 17-member advisory board composed of industry and consumer representatives that provides recommendations to the Commission on usage of fee revenues, and policy issues related to the propane industry.

OFFICE OF GENERAL COUNSEL

The Office of General Counsel provides legal assistance to the Commission and the divisions on both regulatory and administrative matters. The office provides both advisory and advocacy support for the agency's core functions through an enforcement section, an appellate section, an environmental section, and a general law section. In addition, the Office of General Counsel conducts hearings in which agency hearings examiners prepare proposals for decisions for the Commissioners' approval. The office has 57 FTEs, of which 24 are lawyers, and operates on a budget of approximately \$2.7 million a year.

Hearings

Nine of the agency's 24 lawyers are hearings examiners. The office also employs three technical experts to serve as hearings examiners for certain oil and gas matters. Hearings examiners conduct hearings, prepare proposals for decisions, and help draft rules. In fiscal year 2000, the Commission conducted 398 hearings.

The office conducts hearings in three major subject areas. Oil and Gas hearings involve matters relating to oil and gas exploration and production. Gas Services hearings deal with gas utilities, including rate cases, natural gas pipeline safety issues, and propane and liquefied natural gas safety issues. Finally, Surface Mining hearings allow the agency to review and process permits, bonds, and bond releases for surface mining of coal and uranium.

ADMINISTRATIVE SUPPORT

Information technology, personnel, finance, and public assistance are all performed within the agency's Finance and Administration Division. The division provides necessary support services to each of the other agency divisions and programs.

APPENDICES

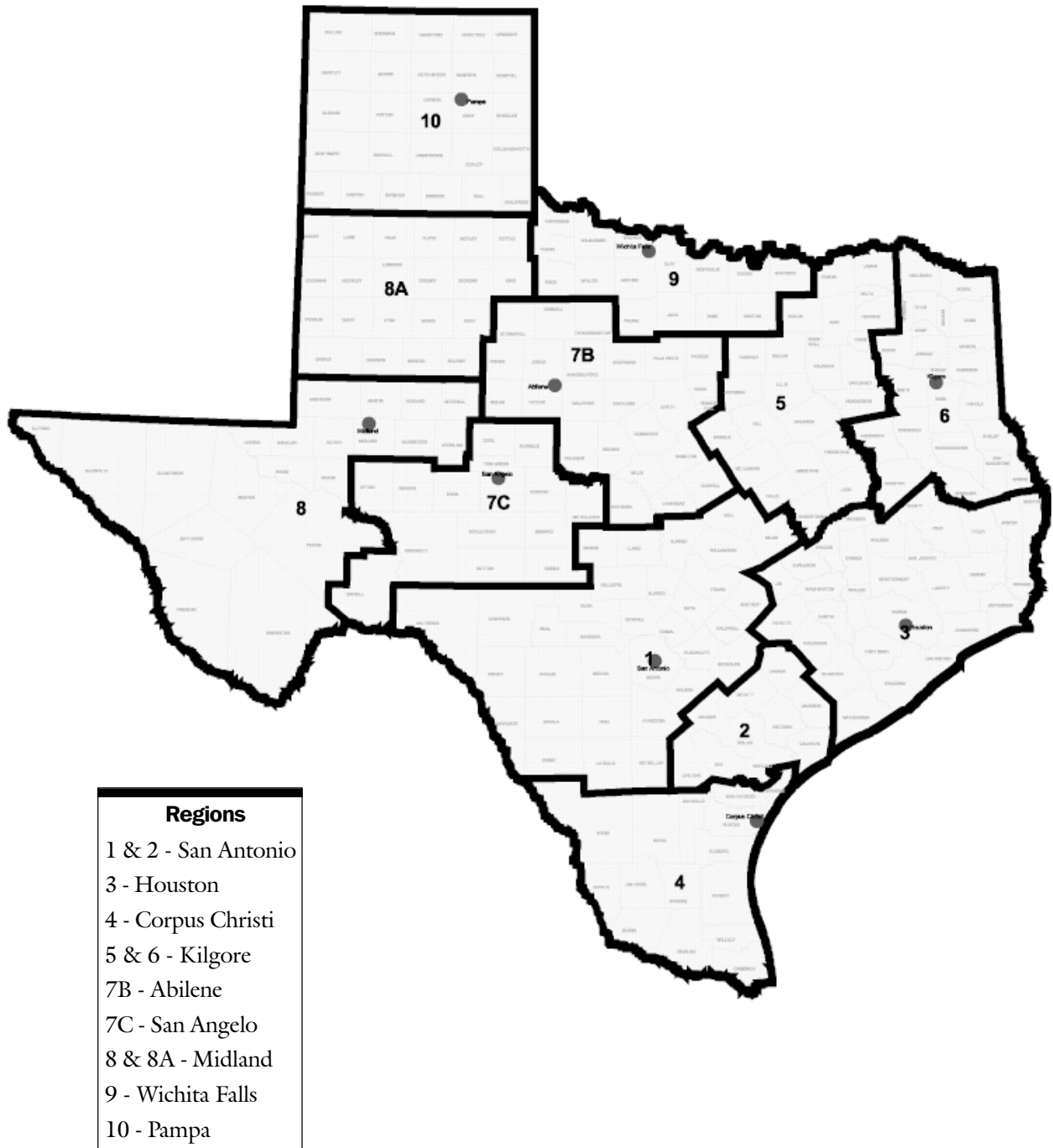
Appendix A

Major Events In Agency History

- 1891 Legislature created the Railroad Commission to regulate rates and operations of railroads, terminals, wharves and express companies.
- 1894 Constitutional amendment changed the method of selecting Railroad Commissioners from gubernatorial appointment to statewide election.
- 1917 Pipelines declared common carriers, Commission given jurisdiction.
- 1919 Commission given power to enforce the conservation of oil and gas.
- 1934 Commission's jurisdiction expanded to include the purchase, transportation, sale, and handling of petroleum and natural gas.
- 1964 Operators required to provide financial assurance for well plugging.
- 1965 Legislature passed the Mineral Interest Pooling Act, authorizing the Commission to provide for the pooling of mineral interests and to allocate production from pooled rights.
- 1975 Legislature required the Commission to regulate the surface mining of coal, lignite, and uranium, and the reclamation of mine lands.
- 1979 Liquefied Petroleum Gas Code designated Commission as regulatory authority over the petroleum gas industry.
- 1980 Texas became the first state authorized by the U.S. Department of Interior to administer a coal regulatory program under the federal Surface Mining Control and Reclamation Act.
- 1985 Legislature directed the Commission to regulate rail safety under federal rail safety program.
- 1991 Legislature imposed fees on the first sale of liquefied petroleum gas to fund Commission's Alternative Fuels Research and Education Division.
- 1994 Federal Trucking Industry Regulatory Reform Act prohibited states from enforcing laws relating to intrastate fares on interstate carriers over routes authorized by the Interstate Commerce Commission.
- 1997 Governor designated the Commission as the primary member of the federal Regional Response team for spill response and planning.
- 1998 One-call pre-digging notification system established to avoid accidental pipeline damage.

Appendix B

Railroad Commission Regions OIL AND GAS DISTRICT BOUNDARIES

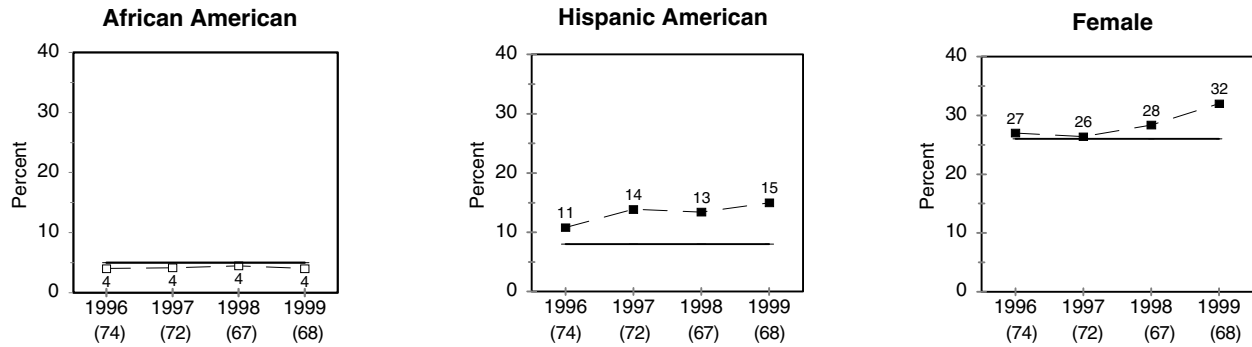


Appendix C

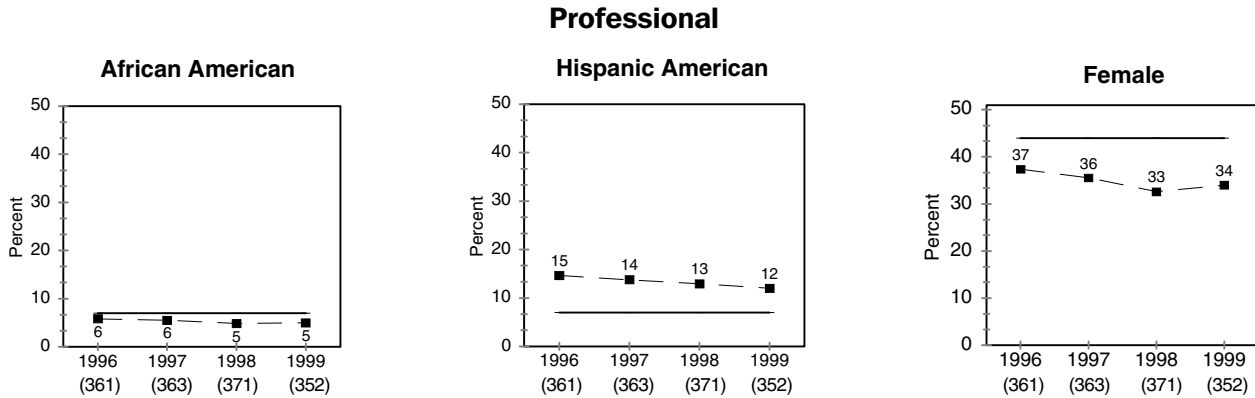
Equal Employment Opportunity Statistics 1996 to 1999

In accordance with the requirements of the Sunset Act,¹ the following material shows trend information for the agency's employment of minorities and females. The agency maintains and reports this information under guidelines established by the Texas Commission on Human Rights.² In the charts, the flat lines represent the percentages of the statewide civilian labor force that African Americans, Hispanic Americans, and females comprise in each job category. These percentages provide a yardstick for measuring agencies' performance in employing persons in each of these groups. The dashed lines represent the agency's actual employment percentages in each job category from 1996 to 1999. Finally, the number in parentheses under each year shows the total number of positions in that year for each job category.

State Agency Administration



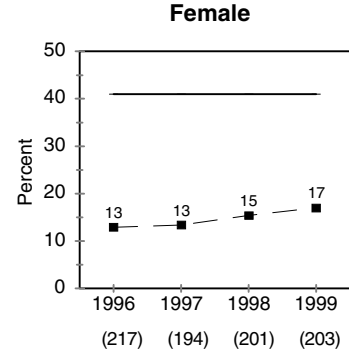
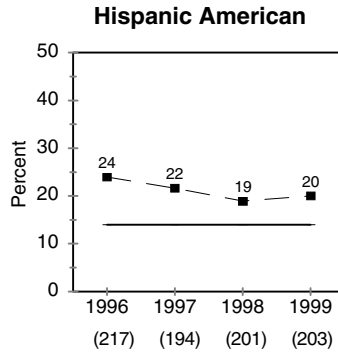
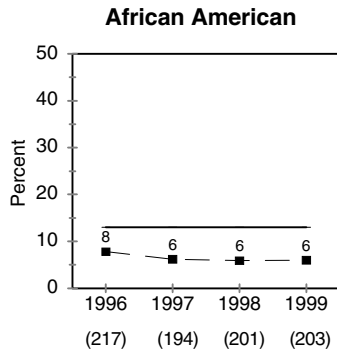
The agency generally met or exceeded the civilian labor force percentages for this job category.



The agency generally met or exceeded the percentages for African-Americans and Hispanic-Americans, but fell below the civilian labor force percentage for females.

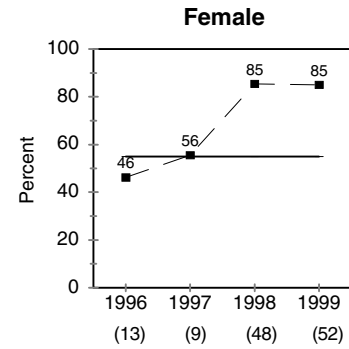
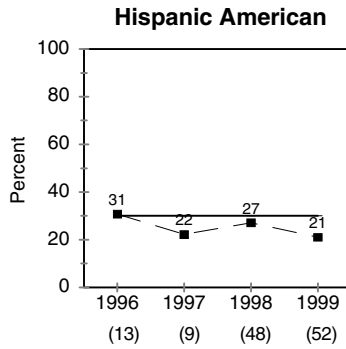
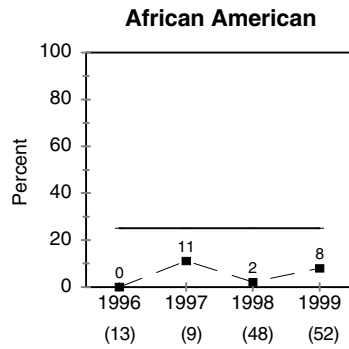
Appendix C

Technical



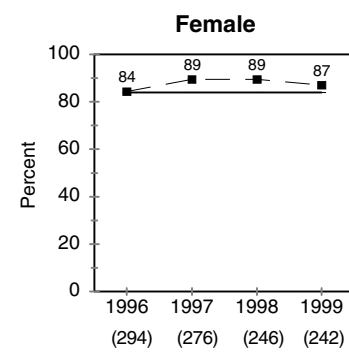
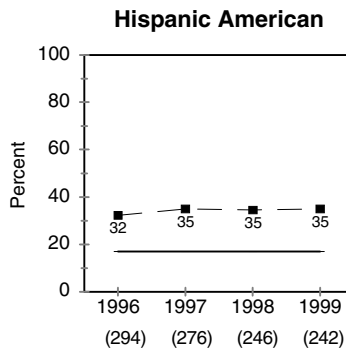
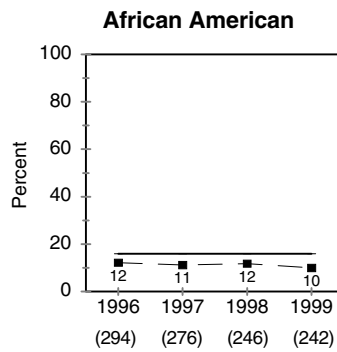
Although the agency exceeded the civilian labor force percentage for Hispanic-Americans, it is below the standard for African-Americans and females.

Paraprofessional



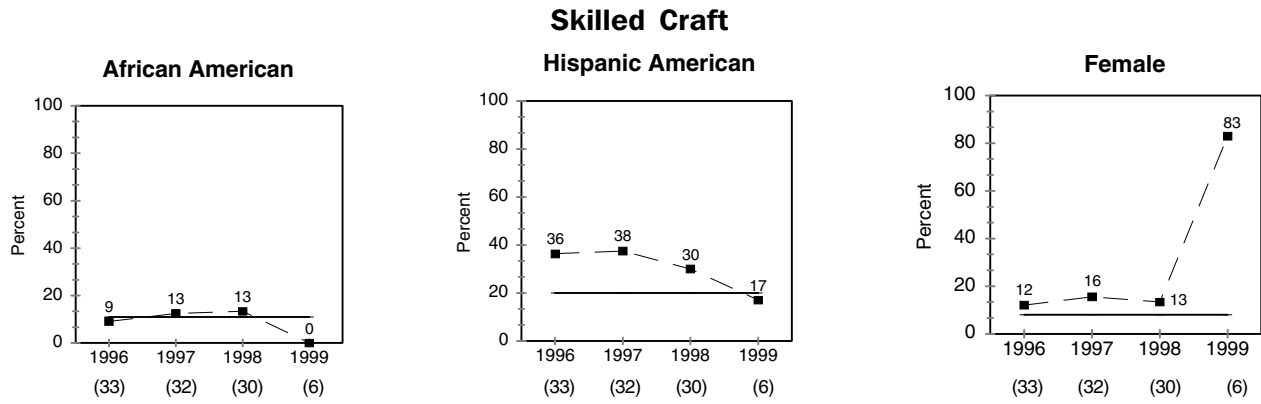
The agency generally met or exceeded the civilian labor force percentages for Hispanic-Americans and females, but is below the standard for African-Americans.

Administrative Support



The agency generally met or exceeded the civilian labor force percentages for this category, but has recently fallen below the standard for African-Americans.

Appendix C



The agency generally met or exceeded the civilian labor force percentages for this category, but has recently fallen below the standard for African-Americans.

Appendix D

Historically Underutilized Businesses Statistics

1996 to 1999

The Legislature has encouraged agencies to increase their use of Historically Underutilized Businesses (HUBs) in purchasing goods and services. The Legislature also requires the Sunset Commission to consider agencies' compliance with laws and rules regarding HUB use in its reviews. In 1999, the Commission purchased 18 percent of goods and services from HUBs. The charts below, provide detail on HUB spending by type of contract for fiscal years 1996 to 1999, and compares these purchases with statewide goals for each spending category. In the charts, the flat lines represent the goal for each purchasing category, as established by the General Services Commission. The dashed lines represent the agency's actual spending percentages in each purchasing category from 1996 to 1999. Finally, the number in parentheses under each year shows the total amount the agency spent in each purchasing category.

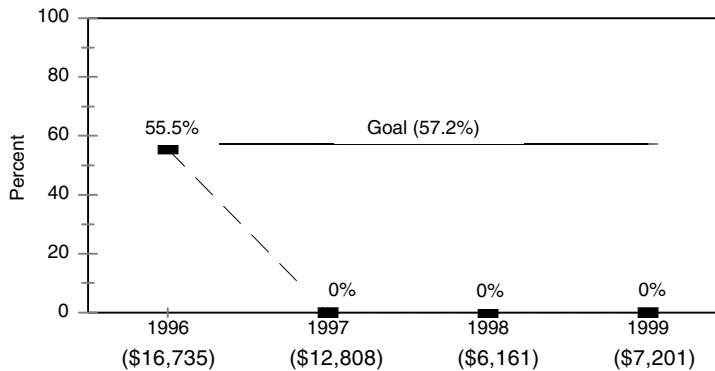
Heavy Construction

The agency did not spend any funds on Heavy Construction between fiscal years 1996 and 1999.

Building Construction

The agency did not spend any funds on Building Construction between fiscal years 1996 and 1999.

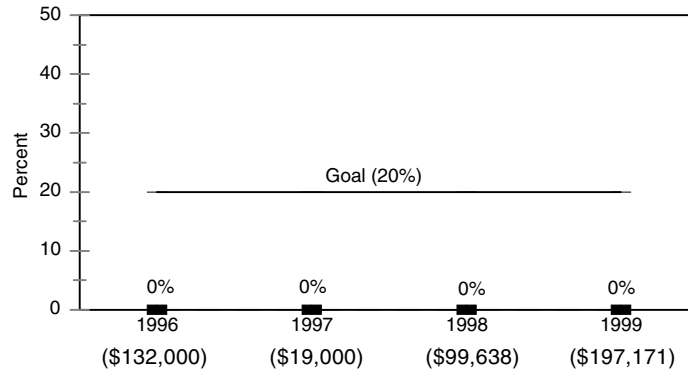
Special Trade



The agency has only met the state goal in fiscal year 1996, although it has had relatively small expenditures in this category.

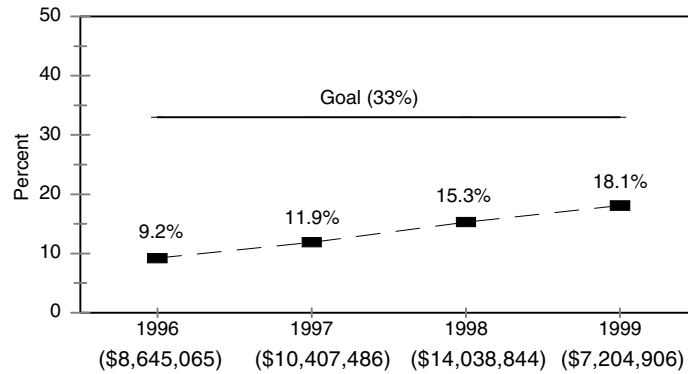
Appendix D

Professional Services



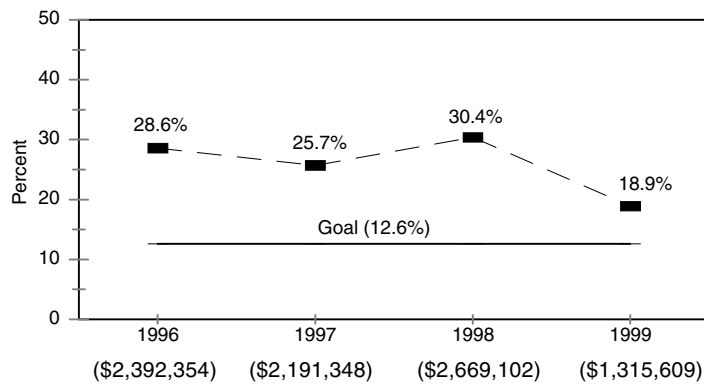
The agency has not had an expenditures with HUBs in this category from 1996 to 1999.

Other Services



Although the agency has made steady improvement, it has fallen below the state goal from 1996 to 1999.

Commodities



The agency significantly exceeded the state goal form 1996 to 1999.

Appendix E

Staff Review Activities

The Sunset staff engaged in the following activities during the review of the Railroad Commission.

- Worked with Commission executive management and staff at the Austin headquarters and with staff in the Houston, San Antonio, and Kilgore district offices.
- Met individually with Commission members and attended public meetings of the Commission.
- Met with legislative committees and key legislators' staff.
- Toured operations and regulated facilities, and met with regulated entities and public interest groups in Austin, Dallas, Fort Worth, Houston, Galveston, Victoria, and Parker, Montgomery, and Milam counties.
- Attended the annual State of the Oil and Gas Industry meeting.
- Attended contested case and rate hearings at the Commission.
- Solicited written comments from state and local interest groups, including those representing the regulated community and the public interest, regarding their ideas and opinions about the agency's operations.
- Researched and surveyed other states regarding the structure and programs of agencies with similar functions.
- Reviewed agency documents, reports, and rules, state and federal statutes, legislative reports, Attorney General opinions, previous legislation, pertinent literature on regulation, other states' information, and information available on the Internet.

**SUNSET REVIEW OF THE
RAILROAD COMMISSION OF TEXAS**

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