

Water Quality in Louisiana

January 2001

Report Highlights

Louisiana Legislative Auditor

Louisiana has an abundance of water resources and relies on these resources not only for livelihood and recreation, but also for drinking. Currently, Louisiana has nearly 2,000 water systems that obtain drinking water from underground aquifers (groundwater) and surface water sources, such as rivers and lakes. About 58% of the state's population obtain drinking water from groundwater and about 42% obtain drinking water from surface water, such as the Mississippi and Red Rivers.

We identified five state departments that regulate and protect the quality of Louisiana's water resources. The departments are as follows:

- ◆ Department of Environmental Quality (DEQ)
- ◆ Department of Health and Hospitals, Office of Public Health (OPH)
- ◆ Department of Natural Resources, Office of Conservation (DNR)
- ◆ Department of Agriculture and Forestry (DAF)
- ◆ Department of Transportation and Development (DOTD)

Audit Results

- ⇒ The departments operating under EPA requirements all have regulatory programs that meet EPA and federal standards for surface and drinking water.
- ⇒ The departments do not always sufficiently monitor regulated entities to ensure that the state's surface and drinking waters are protected. For example, some departments did not conduct all required inspections in 1998 and 1999. In addition, some departments do not review or verify the accuracy of self-monitoring data.
- ⇒ Louisiana's Safe Drinking Water Program at OPH does not rely on self-monitoring data like the other departments because OPH staff collect the data. However, Louisiana is the only state that analyzes these data free of charge.
- ⇒ Some departments did not identify all water quality violations. Therefore, these departments did not always take enforcement action when necessary.
- ⇒ Some enforcement actions did not appear effective because they were not issued timely, were not escalated appropriately, and did not appear to deter future similar violations.
- ⇒ There may be some fragmentation and duplication among programs designed to protect water quality in Louisiana. For example, both OPH and DEQ accredit environmental laboratories.

Some of Louisiana’s Water Quality Monitoring Programs Are Often Insufficient



- **State law and/or department policies require that state departments conduct a certain number of inspections over a specific timeframe.**

What We Found

- Since FY1996, DEQ has not inspected 34% of major facilities according to its inspection policy.
- OPH was delinquent in conducting sanitary surveys of water supply systems for half of the systems in our sample.
- DNR did not conduct 24% of required inspections in FY’s 1998 and 1999 for the injection wells in our sample.
- DAF does not have a formal, electronic tracking system to determine if all required inspections have been conducted.

General Recommendations

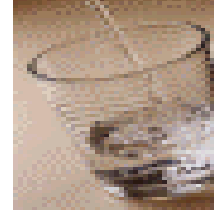
- ✓ The departments should ensure that all inspections are conducted in accordance with the required frequency.
- ✓ DAF should develop a formal, electronic tracking system to track whether all inspections have been conducted.



- **State and federal laws, regulations, and department policies require that regulated entities or persons maintain or submit self-monitoring data that shows compliance with certain requirements.**

What We Found

- DEQ does not routinely review self-monitoring data submitted by minor facilities. As a result, DEQ does not know if these required reports have been submitted or if they show noncompliance. We found that the facilities in our sample did not submit 21% of these reports.
- OPH staff collect water samples and state laboratories analyze most samples. This results in a high compliance rate with monitoring requirements.
- Louisiana’s Safe Drinking Water Program is the only one in the nation that conducts inspections and tests free of charge for all public water supply systems.
- DNR is two years behind reviewing self-monitoring data for some wells. Twenty percent of the required self-monitoring reports were not submitted for the Class II wells in our sample.
- DNR does not completely review monitoring reports from Class II commercial wells. Some of these operators submitted false information on these reports.
- DEQ does not accredit noncommercial laboratories.



General Recommendations

- DEQ and DNR should implement electronic submission of self-monitoring reports.
- DNR should begin completely reviewing self-monitoring reports.

Matters for Legislative Consideration

- ✓ The legislature may wish to consider repealing R.S. 40:5.6, which prohibits OPH from charging public water supply systems a fee for regulatory activities.
- ✓ The legislature may wish to amend R.S. 30:2011(22)(a) to also include accreditation of noncommercial laboratories. This would help ensure that data submitted from these laboratories is more reliable and accurate.

Enforcement Programs Not as Effective as They Could Be

- State and federal laws, regulations, and department policies outline enforcement actions and violations.
- Effective enforcement programs should identify violations timely and appropriately, escalate actions when necessary, deter subsequent violations, and followup to ensure compliance.



What We Found

- DEQ did not have evidence of enforcement actions for 55% of violations in our sample population.
- OPH did not identify 24% of the maximum contaminant level violations that we found in our sample.
- OPH did not routinely require water systems to issue public notification when violations occurred.
- DEQ issued most enforcement actions timely; however, DAF took over a year to finalize some of its actions for hearings in 1999.
- DEQ, DNR, and DAF have not collected over \$441,000 in penalties (about 47%) assessed in 1998 and 1999.
- DNR does not have formal, written criteria for assessing violations and enforcement actions.
- DNR needs to improve its controls relating to receiving monetary penalties. Two checks were misplaced in 1999.

General Recommendations

- ✓ OPH should carefully review sample analysis results for violations.
- ✓ OPH should issue enforcement actions for water systems that fail to issue public notification.
- ✓ DEQ, DNR, and DAF should improve their efforts to collect penalties.
- ✓ DNR should develop formal, written criteria for enforcement actions.
- ✓ DNR should establish procedures to have checks sent directly to its Accounting Section.

Water Quality Programs Fragmented Across Departments

- Survey of the 49 other states showed that:
 - 64% have the National Pollutant Discharge Elimination System (NPDES) permitting program and the Safe Drinking Water Program in one department.
 - 46% house the NPDES permitting program, Safe Drinking Water Program and the Underground Injection Control (UIC) Program in one department.
 - 36% house all four programs in one department.

What We Found

- Louisiana houses four water quality programs (DAF not included) in four different departments as follows:
 - NPDES Permits in DEQ
 - Safe Drinking Water Program in OPH
 - Underground Injection Control Program in DNR
 - Water Well Registration/Driller Program in DOTD
- DEQ and OPH both have laboratory accreditation programs to accredit environmental laboratories. However, some of the same laboratories are accredited by both departments resulting in a duplicative process.
- DEQ and OPH both have roles in the sewage treatment plant approval process. However, lack of formal communication between the two departments makes this process inefficient.

Matter for Legislative Consideration

- ✓ The legislature may wish to consider whether water quality protection programs could be consolidated into fewer departments.

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STATE OF LOUISIANA LEGISLATIVE AUDITOR

Water Quality in Louisiana

January 5, 2001



Performance Audit

Daniel G. Kyle, Ph.D., CPA, CFE
Legislative Auditor

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Water Quality in Louisiana

January 5, 2001



**Performance Audit
Office of the Legislative Auditor
State of Louisiana**

**Daniel G. Kyle, Ph.D., CPA, CFE
Legislative Auditor**

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January 5, 2001

The Honorable John J. Hainkel, Jr.,
President of the Senate
The Honorable Charles W. DeWitt, Jr.,
Speaker of the House of Representatives

Dear Senator Hainkel and Representative DeWitt:

This performance audit report gives the results of our performance audit of the state departments responsible for protecting Louisiana's water quality. This audit is part of the National State Auditors Association annual joint performance audit and was conducted under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended.

This report contains our findings, conclusions, and recommendations. It also contains three matters for legislative consideration. Appendix K contains the responses from all affected departments. I hope this report will benefit you in your legislative decision-making process.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel G. Kyle". The signature is fluid and cursive.

Daniel G. Kyle, CPA, CFE
Legislative Auditor

DGK/dl

[WATERQUA]



Office of Legislative Auditor

Performance Audit Water Quality in Louisiana Executive Summary

Louisiana has an abundance of water resources. State law charges at least five state departments with protecting these resources--Department of Environmental Quality (DEQ); Department of Health and Hospitals, Office of Public Health (OPH); Department of Agriculture and Forestry (DAF); Department of Natural Resources (DNR); and Department of Transportation and Development (DOTD). The results of this performance audit show that:

Water Quality Standards *(See page 13 of the report.)*

- State standards to protect water quality meet federal standards.

Monitoring and Inspections *(See pages 15-38 of the report.)*

- Some facilities that discharge pollutants into Louisiana waterbodies are operating under expired permits.
- Inspections designed to ensure compliance with permit limits or legal requirements are not always conducted according to required schedules.
- DEQ and DNR rely heavily on self-monitoring data to prove compliance with permit limits or legal requirements. However, these departments do not always review or verify the accuracy of these data.
- Louisiana's Safe Drinking Water Program at OPH does not rely on self-monitoring data because OPH staff collect these data. As a result, Louisiana has a high compliance rate with monitoring requirements.
- Louisiana is the only state that does not charge water systems that supply drinking water for inspections, sample analysis and other regulatory related activities.

Violations and Enforcement Actions *(See pages 39-60 of the report.)*

- DEQ, DNR, and OPH did not identify all violations. Therefore, these departments did not always take enforcement action when necessary.
- Some enforcement actions did not appear to be effective because they were not issued timely, were not escalated appropriately, and did not appear to deter future similar violations.

Fragmented Programs *(See pages 61-69 of the report.)*

- There may be some areas of fragmentation and duplication among programs designed to protect water quality in Louisiana. For example, both OPH and DEQ accredit environmental laboratories.

Audit Objectives

This performance audit was conducted under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. The objectives of the audit were:

- I. Do individual state regulatory programs meet or exceed minimum EPA standards for drinking water and surface water?
- II. Do individual states have an effective monitoring program for drinking water and surface water?
- III. Do individual states apply corrective actions effectively?
- IV. Are Louisiana's water quality programs fragmented?

Do individual state regulatory programs meet or exceed minimum EPA standards for drinking water and surface water?

We found that four of the state departments we reviewed (excludes DOTD) have regulatory programs that met the minimum United States Environmental Protection Agency (EPA) standards for drinking and surface water. All of these departments have obtained primacy from the EPA to oversee the respective program. For states to receive primacy for EPA programs, the state program and its legal requirements must be at least as stringent as EPA's requirements. EPA conducts annual or semiannual reviews of each agency's program to ensure that states are following and maintaining these requirements. Appendix D contains a summary of EPA's audit findings for these programs for fiscal years 1998 and 1999.

(See page 13 of the report.)

Do individual states have an effective monitoring program for drinking water and surface water?

Generally, Louisiana's four state departments that are responsible for water quality do not always have sufficient monitoring programs to ensure that the state's drinking and surface waters are safe. As a result, these monitoring programs are not as effective as they could be. We defined "effective" as whether agencies were following requirements and procedures outlined in federal and state laws that are intended to protect state waters.

All four departments with water quality responsibilities have monitoring programs designed to protect water quality. Most of these monitoring programs rely heavily on individuals or entities to monitor themselves through permit, legal and other requirements with occasional inspections or reviews by the regulatory agencies. Specifically, all of these monitoring programs involve at least one of the following two activities:

1. Physical inspection of the person or entity regulated to verify compliance with permits or other requirements
2. Review of self-monitoring data that entities or persons keep to prove daily compliance with permits or other requirements

Overall, these departments do not always follow requirements and procedures designed to help ensure that Louisiana waters are protected. While we did find that Louisiana's drinking water is generally safe because of effective monitoring by OPH, the other departments all have deficiencies regarding effectiveness of inspections and reliability of self-monitoring data. For example, we found that DEQ and DNR do not always inspect facilities when they should. In addition, DEQ does not thoroughly review self-monitoring data for minor facilities and DNR has a two-year backlog of unreviewed self-monitoring data. Some of the data submitted to DNR contained false entries. Furthermore, unlike the other regulatory agencies, DAF does not require that self-monitoring data be submitted for review nor does it ensure that records are reviewed at least annually during inspections.

(See pages 15-38 of the report.)

DEQ recommendations:

Recommendation II-1: DEQ should ensure that its inspectors conduct all inspections at the frequency required by its policies and procedures.

DEQ's Response: DEQ recently underwent reengineering and surveillance staff are being cross-trained to do inspections for more than one medium.

Legislative Auditor's Additional Comments: DEQ provided additional information subsequent to our fieldwork. Based on this additional information, some of the inspections we identified as "never conducted" as of November 1999 may have been conducted in 2000.

Recommendation II-2: DEQ should at least spot check self-monitoring data for minor facilities. DEQ could also implement a priority system for reviewing self-monitoring data for facilities that are consistently out of compliance. When resources allow, DEQ should begin entering more permit limits on minor facilities into the Permit Compliance System.

DEQ's Response: DEQ agrees that the department could do a better job of reviewing monitoring data for minor facilities.

Recommendation II-3: DEQ should implement electronic submission of discharge monitoring reports. This may result in a more efficient review of self-monitoring data.

DEQ Response: DEQ states that within 18 months, the department will be able to accept all data electronically.

Matter for Legislative Consideration 1: The legislature may wish to amend R.S. 30:2011(22)(a) to also include accreditation of noncommercial laboratories. This would help ensure that data submitted from these laboratories are more reliable and accurate.

OPH recommendations:

Recommendation II-4: OPH should implement a centralized structure with regional and district staff reporting directly to the Central Office.

DHH/OPH Response: OPH disagrees with this recommendation and will continue the current organizational structure of regional administrators and center directors adopted on November 1, 2000. OPH believes that this new structure is the most effective and efficient structure.

Legislative Auditor's Additional Comments: The structure adopted on November 1, 2000, does not change the fact that the regional offices are still located in a separate center (formerly division) than the Engineering Services Central Office. The 1998 and 1999 EPA audits of the public water supply supervision program (Safe Drinking Water Program) recommend that OPH consider becoming a more centralized organization with regional staff dedicated solely to conducting drinking water activities and that regional drinking water staff report directly to the management at the Central Office. The EPA audit also stated that the other states in EPA Region VI have become more centralized organizations and resulted in improved coordination and communication of drinking water program priorities.

Recommendation II-5: The assistant secretary should facilitate the sharing of best management practices among districts, if the office is not restructured.

DHH/OPH Response: OPH stated that since spring 2000 the regional office Engineering Services staff has been meeting regularly with Central Office staff in quarterly meetings to share and standardize procedures.

Recommendation II-6: The Central Office in Engineering Services should develop a standard policies and procedures manual for the district and regional offices to help promote standardization.

OPH/DHH Response: OPH agrees with this recommendation and plans to completely overhaul the *Standard Operating Procedures Manual*.

Recommendation II-7: OPH's Engineering Services should provide training to the district and regional offices on the importance of maintaining the Safe Drinking Water database.

DHH/OPH Response: OPH did not directly respond to this recommendation. Its response discusses the new database system that should be fully implemented by January 2001. In addition, OPH stated that since the Safe Drinking Water Program staff is being increased because of a corresponding increase in the federal program, sufficient clerical staff to meet the input requirements for the database should soon be available.

Recommendation II-8: OPH district and regional staff should ensure that the correct number of samples are collected.

DHH/OPH Response: OPH responded that it will implement enhanced staff training and unscheduled internal audits. OPH also stated that it has relied on EPA audits for data verification and the EPA audits have not shown major deficiencies in sample collection.

Legislative Auditor's Additional Comments: If the EPA audits do not cover the same data that this performance audit covered, i.e., actual sample analysis reports, then the internal audits should cover these data.

Recommendation II-9: OPH's Engineering Services New Orleans District should issue monitoring violations to those public water systems that do not collect the correct samples.

DHH/OPH Response: OPH responded that it relies on EPA audits for deficiency verification and the annual EPA audits have not cited any major deficiencies in monitoring, other than a chronic staff shortage.

Recommendation II-10: OPH's Engineering Services Lafayette District should continue its efforts to train the parish sanitarians in sample collection techniques.

DHH/OPH Response: OPH agrees with this recommendation and states that a standardized formal training program for all sanitarians that includes sample collection training was implemented in 2000.

Recommendation II-11: The Laboratory Certification program should require non-state owned laboratories to use the same forms that the state laboratories use or use forms that contain the same information as the state forms. In addition, results should be reported for each sample collected, not just summary totals.

DHH/OPH Response: OPH agrees with this recommendation and has initiated this procedure.

Recommendation II-12: OPH should continue striving to meet the sanitary survey goals in the EPA workplan.

DHH/OPH Response: OPH plans to revise its sanitary survey goals in the EPA workplan.

Matter for Legislative Consideration 2: The legislature may wish to consider repealing R.S. 40:5.6, which prohibits OPH from charging public water systems a fee for regulatory activities.

DHH/OPH Response: OPH agrees with this matter.

DNR recommendations:

Recommendation II-13: DNR should ensure that inspectors conduct all required inspections in accordance with its policies and procedures.

DNR Response: DNR agrees with this recommendation.

Recommendation II-14: DNR should amend its regulations to include a policy on the frequency of inspections and Mechanical Integrity Pressure Tests for facilities with Class II commercial wells.

DNR Response: DNR partially agrees but would rather implement a standard operating procedures manual than amend state regulations.

Recommendation II-15: DNR should implement electronic submission of self-monitoring reports. This may help to reduce the two-year backlog in reviewing those reports.

DNR Response: DNR stated that electronic submission of reports will not improve a backlog of report review if manpower is not available to review the submitted information.

Legislative Auditor's Additional Response: Electronic submission of reports would enable the computer database to compare reported limits to permitted limits and generate exception reports for those wells with permit violations. As a result, DNR staff would only have to review the data that shows deviations from permitted limits.

Recommendation II-16: DNR should begin reviewing the injection pressure in addition to the annulus pressure on the monthly reports.

DNR Response: DNR agrees with this recommendation and has implemented this review.

Recommendation II-17: DNR should include an attestation on all monitoring forms that informs operators of penalties for submitting false information. R.S. 30:17 allows penalties of not more than \$5,000 for false entries on reports.

DNR Response: DNR agrees with this recommendation and will consult legal counsel to determine the most appropriate wording to include on these reports.

Recommendation II-18: DNR should review a sample of operator's records during inspections and compare an annual report against operator's records to determine if an injection pressure greater than the maximum reported on the annual report was recorded.

DNR Response: DNR agrees with this recommendation and will implement actions to compare monthly Class II commercial well reports with the annual reports.

Recommendation II-19: DNR should ensure that the most current surface injection pressure is accurate in its database.

DNR Response: DNR agrees with this recommendation and is working within the framework of a new computer system to improve the availability of permitted surface injection pressures for wells.

DAF recommendations:

Recommendation II-20: DAF should modify its electronic database to track inspections by type to ensure that its policy of conducting record review inspections annually is met.

DAF Response: DAF presently has a manual database and an electronic database. The electronic database is being upgraded.

Legislative Auditor's Additional Comments: DAF's electronic database as it existed during our fieldwork could not distinguish among types of inspections.

Recommendation II-21: DAF should develop formal written policies to replace its informal ones.

DAF Response: DAF agrees with this recommendation.

Recommendation II-22: DAF should develop a standardized form on which applicators can record pesticide application information.

DAF Response: DAF disagrees with this recommendation and states that it does have a standardized form.

Legislative Auditor's Additional Comments: DAF approves a standardized format not a standardized form. A standardized form would improve the efficiency of records inspections.

Do individual states apply corrective actions effectively?

Enforcement programs within the Louisiana departments that are responsible for water quality are not as effective as they could be. As a result, enforcement actions may not ensure that violations are promptly and appropriately corrected. Therefore, continued noncompliance may result in harm to Louisiana waterbodies.

According to EPA standards and requirements for state programs, effective enforcement programs should contain a variety of key elements. Some of these elements include:

- Appropriate and timely identification of violations
- Enforcement actions should deter violators from future noncompliance or reduce violations
- Escalation of enforcement actions when violations recur
- Follow-up on enforcement actions to verify compliance
- Penalty assessment and collection

We reviewed various aspects of the enforcement processes relating to water quality at each of the four state departments. We used one or more of the above factors to determine whether individual enforcement programs at these agencies were effective. Overall, all of the departments need improvement in issuing appropriate enforcement actions and collecting penalties. In addition, all departments were not always effective at appropriately identifying violations. For example, DEQ did not issue enforcement actions for over 55% of all violations in our sample, and OPH failed to identify 24% of violations. Most departments did not conduct follow-up to determine if violators returned to compliance. In addition, three of the departments have not collected over \$440,000 in the penalties that were assessed in 1998 and 1999.

(See pages 39-60 of the report.)

DEQ recommendations:

Recommendation III-1: DEQ should develop a policy that requires facilities to formally respond to discrepancies found during inspections. It should also update the Enforcement Management System document to reflect this policy.

DEQ Response: DEQ stated that changes to the Enforcement Management System document have been drafted and are being reviewed.

Recommendation III-2: DEQ should track facilities with poor compliance records more closely.

DEQ Response: DEQ stated that facilities with continuing or recurring violations are often the subject of multiple or escalated enforcement actions. These facilities generally receive more attention from both surveillance and enforcement staff.

Recommendation III-3: DEQ should issue enforcement actions as close to when violations occur as possible.

DEQ Response: DEQ agrees with this recommendation.

Recommendation III-4: DEQ should develop additional requirements for beneficial environmental projects, including requiring that facilities submit actual costs of the project and ensuring that the project costs at least as much as the original penalty. In addition, DEQ should inspect the projects once they are complete to verify satisfactory completion or have project beneficiaries submit a letter certifying that projects are completed and satisfactory.

DEQ Response: DEQ does not agree with the recommendation that it needs additional requirements for beneficial environmental projects. However, DEQ does agree that the department could incorporate a more formal process for tracking or documenting final completion of the requirements.

OPH recommendations:

Recommendation III-5: OPH regional engineering staff should review sample analysis results carefully to determine if an MCL violation has occurred and to ensure that all violations receive an enforcement action.

DHH/OPH Response: OPH will implement a system of random auditing of regional files for compliance with MCL violation identification.

Recommendation III-6: OPH should take enforcement action against water systems that fail to issue public notification.

DHH/OPH Response: OPH did not directly address this recommendation. However, it will issue a policy for the regions to keep verification records that public notices were issued by water systems. It will also implement a uniform documentation procedure within the *Standard Operating Procedures Manual*.

Recommendation III-7: OPH should begin issuing enforcement actions for failure to correct significant deficiencies identified by sanitary surveys.

DHH/OPH Response: OPH responded that the reduced sanitary survey schedule will free personnel to perform more follow-up and documentation of corrections to significant deficiencies.

Recommendation III-8: OPH should implement a policy that requires follow-up when sanitary surveys show significant deficiencies.

DHH/OPH Response: OPH responded that the reduced sanitary survey schedule will free personnel to perform more follow-up and documentation of corrections to significant deficiencies.

Recommendation III-9: The Enforcement Unit should be given access to the database by the Central Office in order to enter enforcement codes for actions it initiates.

DHH/OPH Response: OPH agrees with this recommendation and with the implementation of the new database, the Enforcement Unit will have access to the database.

DNR recommendations:

Recommendation III-10: DNR should develop formal, written criteria for enforcement actions or a penalty matrix similar to other regulatory agencies.

DNR Response: DNR will consider the development of formal, written criteria and a penalty matrix for enforcement actions.

Recommendation III-11: DNR should maintain documentation that shows how it determines what enforcement action to take.

DNR Response: DNR agrees with this recommendation and will consider procedures to document how enforcement actions are determined.

Recommendation III-12: DNR should establish procedures to have checks sent directly to its Accounting Section. The Accounting Section can then notify the Enforcement Section when funds have been received.

DNR's Response: DNR agrees with this recommendation and is working within the framework of the policies and procedures on the DNR Accounting Section.

DAF recommendations:

Recommendation III-13: DAF should consider prior warning letters when determining the severity of the enforcement action and penalty in accordance with its Enforcement Response Policy.

DAF Response: DAF does not agree with this recommendation. DAF does not consider a warning letter an offense.

Legislative Auditor's Additional Comments: DAF's Enforcement Response Policy approved by EPA allows DAF to consider previous warning letters when determining the severity of the penalty. The penalty matrix requires that DAF determine if the current violation is minor, moderate, or major. The Enforcement Response Policy states that factors that may be considered when determining whether a violation is moderate or major include prior warning letters. However, the department has not formally promulgated this policy according to the Administrative Procedures Act.

Recommendation III-14: DAF should ensure that its database includes historical data on pesticide applicators. DAF should also develop an integrated system that includes data on complaints, violations, inspections, certificates, and other compliance information. This would allow DAF to keep more accurate totals for EPA reporting instead of manually tracking this information.

DAF Response: DAF partially agrees with this recommendation. DAF has an electronic database that will eventually include all data that are relevant to enforcement and reporting functions.

Are Louisiana's water quality programs fragmented?

During our audit, it came to our attention that Louisiana's programs that protect the state's waterbodies are spread over several departments. Unlike other states, Louisiana programs that are designed to protect water quality are housed in at least five different state departments. Because these programs are in separate departments, some water quality functions may not formally coordinate certain water quality responsibilities. This lack of formal coordination and communication often results in fragmentation. For instance, both OPH and DEQ have laboratory accreditation programs. Both of these programs are in the process of becoming accredited by the same national accrediting entity and both accredit laboratories for environmental purposes. Because both departments may accredit the same laboratories, these two programs could be combined under one administrative entity to reduce costs to the state.

In addition, the approval process to construct and maintain a sewage treatment plant is divided between two departments. This fragmentation accompanied with the lack of a formal communication between the two agencies results in an inefficient process.

(See pages 61-69 of the report.)

Recommendation IV: The Drinking Water Revolving Loan Fund Program and the Safe Drinking Water Program should be combined into one program.

DHH/OPH Response: OPH disagrees with this recommendation.

Matter for Legislative Consideration 3: The legislature may wish to consider whether water quality programs should be consolidated into fewer departments. If consolidation is not feasible, the legislature may wish to enact legislation requiring DEQ and OPH to formally work together on the approval of sewage treatment plants.

DHH/OPH Comments: OPH stated that DEQ and OPH will form a task force to eliminate inefficiencies and ensure smooth cooperation in permitting sewage systems and that the two agencies have already been working on a method to share database information. However, they do not believe that these matters require legislative action.

Introduction

AUDIT INITIATION AND OBJECTIVES

The Office of the Legislative Auditor conducted this performance audit as part of the National State Auditors Association (NSAA) 2000 joint performance audit on water quality. Each year the NSAA selects an audit topic of national interest in which states can choose to participate. We chose to participate in this audit and received Legislative Audit Advisory Council approval on August 26, 1999.

The NSAA joint audit planning team developed a set of suggested objectives and audit steps. We used these objectives and added specific steps designed to address Louisiana concerns. For our specific scope and methodology, see Appendix A. Appendix B is a glossary of environmental terms used throughout this report.

The audit objectives are as follows:

- I. Do individual state regulatory programs meet or exceed minimum EPA standards for drinking water and surface water?**
- II. Do individual states have an effective monitoring program for drinking water and surface water?**
- III. Do individual states apply corrective actions effectively?**

We also added the following objective that was not in the original audit plan:

- IV. Are Louisiana's water quality functions fragmented?**

WATER QUALITY IN LOUISIANA

Louisiana has an abundance of water resources and relies on these resources not only for livelihood and recreation but also for drinking. Currently, Louisiana has approximately 1,850 water systems that obtain drinking water from underground aquifers (groundwater) and surface water sources, such as rivers and lakes. About 58% of the state's population obtain drinking water from groundwater and about 42% obtain drinking water from surface water, such as the Mississippi and Red Rivers.

Louisiana Water Facts

- **66,294 square miles of rivers and streams**
- **7,656 square miles of estuaries**
- **1,684 square miles of lakes**
- **10 named aquifers of groundwater**
- **About 1,850 water systems**
 - **60 surface water supply systems**
 - **1,700 groundwater supply systems**
 - **Other combination systems**

Source: 2000 Water Quality Inventory and data from OPH.

Various activities and industries can cause contamination to both groundwater and surface water. According to DEQ's Source Water Assessment report, high-risk potential sources of contamination to groundwater include abandoned water wells, above ground storage tanks, animal feed lots, septic systems and petroleum plants. High-risk potential sources of contamination to surface water include pesticide applications, urban runoff, and transportation spills.

Status of Louisiana's Water

- **According to EPA data, 73% of waterbodies are impaired.**
- **According to EPA data, 70% of surface water sources are impaired. Thirty-four of 35 of those waterbodies still meet designated use for drinking water.**
- **According to EPA's Web site, the overall quality of Louisiana's groundwater is good.**
- **Louisiana ranks 2nd in toxic releases to surface water.**
- **Louisiana ranks 2nd in toxic releases to underground injection.**
- **Forty-one percent of waterbodies are not supporting their designated use (i.e., not swimmable or fishable).**
- **Most common sources of impairments are industry and municipal point sources and agriculture nonpoint sources.**
- **Most common causes of impairments are low dissolved oxygen, fecal coliform, and oil and grease.**

Source: Toxic Release Inventory, Water Quality Inventory, and EPA approved list of impaired waterbodies.

The box on the left shows that a large percentage of Louisiana's waterbodies are impaired. *Impaired* means that these waterbodies do not meet water quality standards and designated uses of those waterbodies are not being maintained. Water quality standards are standards set by the state and approved by the United States Environmental Protection Agency (EPA). These standards identify the amount of a specific pollutant that may be present in the water and still consider the water safe. Designated uses mean that the water may be used for fishing, swimming, drinking or other activities.

The main suspected sources of impairments are from point source municipal and industrial permitted facilities. These municipal and industrial facilities obtain permits from DEQ to discharge certain levels of wastewater and other pollutants into state waterbodies. The permits set forth the amount and types of pollutants in the wastewater that the facility is allowed to discharge. Agricultural nonpoint sources are another cause of impairment. Agricultural activities that cause nonpoint source pollution include confined animal facilities, grazing, plowing, pesticide spraying, irrigation, fertilizing, planting, and harvesting. Other nonpoint sources

that can contribute pollutants to waterbodies include forestry activities, construction, urban runoff, septic systems, and hydrologic modification.

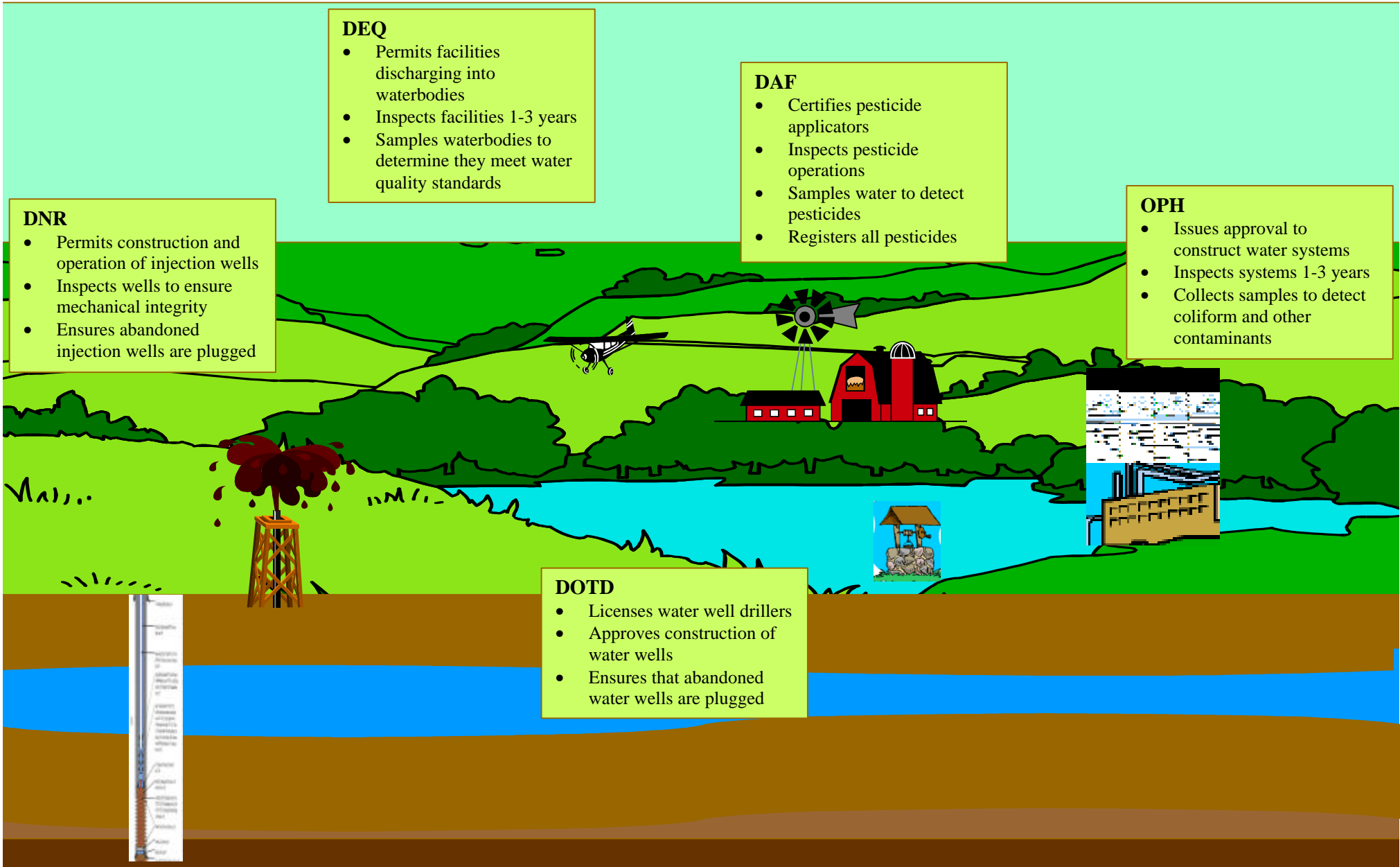
According to the most recent Toxic Release Inventory, Louisiana ranks second in the nation of releases of toxic chemicals to surface waters. Appendix C shows the parishes and facilities where the highest number of pounds of toxic substances are released to surface water. The top three toxic chemical releases reported in the Toxic Release Inventory in 1998 in Louisiana were phosphoric acid, ammonia, and methanol. These chemicals are produced primarily from the fertilizer and paper mill industries. However, phosphoric acid has recently been removed from EPA's list of toxic chemicals. In addition, Louisiana ranks second in the nation in the number of pounds of toxic chemicals disposed into underground injection wells.

These statistics do not necessarily mean that Louisiana water is unsafe for drinking usage. Water systems that provide water to communities treat this water to rid the water of pollutants and other impurities before it enters the tap. In addition, the EPA has commended Louisiana Department of Health and Hospitals' Safe Drinking Water Program for its high percentage of compliance with drinking water monitoring requirements.

At least five state departments regulate and protect Louisiana water quality. Federal laws under the Clean Water Act or Safe Drinking Water Act govern most of these agencies. In addition, the EPA has granted primacy to four of these state departments to oversee programs authorized under the federal laws. Primacy means that EPA has determined that state laws and regulations are at least as stringent as the federal ones. Primacy then results in a state-run instead of a federal-run program. EPA audits each state program at least once a year to ensure that the state is in compliance with program requirements. EPA audit findings in Louisiana for 1998 and 1999 are summarized in the chart in Appendix D.

Exhibit 1 illustrates the primary roles each state department has related to water quality. The specific duties relating to protecting water quality are summarized in more detail in the following sections. Since the audit plan specifically focused on monitoring/inspections and enforcement, we summarized procedures relating to those activities for each department.

Exhibit 1: Graphic Illustration of Departments and Their Water Quality Responsibilities



Source: Prepared by legislative auditor’s staff using data from state departments.

Department of Environmental Quality (DEQ)

R.S. 30:2011 designates DEQ as the primary state agency concerned with environmental protection and regulation, including water pollution control and protection of scenic rivers and streams. DEQ also develops water quality standards for all Louisiana waterbodies. These standards identify the designated use for each waterbody and specific numerical levels for certain substances in those waterbodies. According to DEQ officials, the number of DEQ staff currently devoted to water quality related activities is 230. The budget devoted to water quality activities is approximately \$18.4 million.

DEQ's Water Quality Mission

To ensure that the citizens of Louisiana have clean and healthy water to drink and use for present and future generations by regulating pollution sources and providing technical support for the restoration of polluted waters.

Source: 2000 Executive Budget

DEQ's three main offices that deal with water protection and regulation are as follows:

- Office of Environmental Services issues water discharge permits.
- Office of Environmental Compliance performs inspections, samples water, and issues enforcement actions for permit violations.
- Office of Environmental Assessment develops water quality standards and addresses nonpoint source pollution.

Monitoring Activities

DEQ conducts two main types of monitoring activities--ambient monitoring and compliance monitoring. Ambient monitoring involves the collection and analysis of water samples in 12 basins across Louisiana. DEQ samples those basins with the most impaired waterbodies first. Compliance monitoring is twofold. It includes the physical inspection of permitted facilities to ensure compliance with permit limits and the review of self-monitoring data that the facilities submit.

Another monitoring activity is the actual inspection of permitted facilities. DEQ's goal is to inspect approximately 250 major facilities annually and over 6,000 minor facilities every three years. The purpose of these inspections is to verify compliance with permit effluent limits and/or develop enforcement documentation. Inspection procedures consist of water sampling, record review, and visual observations.

Enforcement Activities

State law and regulations authorize DEQ to issue compliance orders, civil and criminal penalties, cease and desist orders and other actions for certain violations. DEQ discovers these violations through a variety of referrals, including referrals from inspectors or from review of self-monitoring data. Common violations include unpermitted discharges and effluent excursions, where facilities spill or discharge amounts or substances not authorized by the permit.

Department of Health and Hospitals, Office of Public Health (OPH)

R.S. 40:4(A)(8)(a) states that OPH is responsible for ensuring that drinking water is safe and potable for human use. OPH is also responsible for ensuring that public drinking water systems within the state are in compliance with state regulations. These regulations must be at least as stringent as the federal drinking water regulations in the Safe Drinking Water Act. Furthermore, OPH is responsible for protecting the public from disease and nuisance resulting from the improper disposal of sanitary sewage and the regulation of swimming pools and recreational bathing places.

OPH's Mission

Provide inspection and correction of conditions that may cause disease to Louisiana citizens or those that buy goods produced in Louisiana. To provide on-site evaluation of all qualified labs for the purpose of certification under State and federal regulations in the specialties of water, milk and dairy products.

Source: 2000 Executive Budget

During the scope of our audit, OPH was divided into six divisions; however, as of November 1, 2000, OPH has consolidated the divisions into four centers. The Drinking Water Program covers three of OPH's six divisions; under the new structure, the Drinking Water Program covers three centers. The following three OPH divisions have water quality responsibilities:

- The Environmental Health Division contains the Drinking Water Revolving Loan Fund Program and the Engineering Services Program. Engineering Services is primarily responsible for the Safe Drinking Water Program.
- The Division of Laboratory Services is responsible for providing environmental assessments of drinking water and recreational waters. It is also responsible for certifying environmental laboratories to perform microbiological and chemical analyses of water.
- The Division of Community Health houses the district and regional offices. The personnel at these offices are responsible for the implementation of the majority of the Safe Drinking Water Program.

Actual expenditures for the Safe Drinking Water Program in FY 2000 were \$4,739,986. This program is funded by a federal grant and a state match. Beginning with FYE 2001, a fee will be collected from consumers to help offset the program's costs. Currently, the Safe Drinking Water Program has 12.5 full-time equivalents (FTEs) in the Central Office and 22 FTEs in the district and regional offices for a total of 34.5 FTEs in the Safe Drinking Water Program. This number does not include laboratory personnel or the parish sanitarians that collect water samples because these personnel are shared among various programs besides the Drinking Water Program.

Monitoring Activities

OPH conducts two types of monitoring: sanitary surveys/inspections of public water systems and sample collection/analysis. As of March 2000, there were approximately 1,861 active public water systems in the state.

Unlike other water quality programs, the Safe Drinking Water Program in Louisiana does not rely heavily on self-reported data. For the majority of the public water systems, samples are collected by state employees (regional/parish sanitarians) and analyzed by state-run laboratories. Sanitarians collect monthly samples for microbiological analyses and periodic samples for chemical analyses. OPH district/regional staff review sample results to determine compliance or noncompliance with water quality standards. Sample results are also reviewed to determine compliance with monitoring (sampling) requirements. OPH staff also conduct sanitary survey inspections annually for surface water systems and once every three years for groundwater systems. Sanitary surveys determine compliance with the state's sanitary code.

Enforcement Activities

State law authorizes OPH to issue administrative orders, civil actions, and penalties against public water systems that have violations. Federal primary drinking water regulations require public water systems with Maximum Contaminant Level (MCL) violations and monitoring violations to issue public notification. MCL violations are violations where a water system exceeds the maximum level of a certain substance allowed under federal law. OPH issued 481 notices of violations in calendar years 1998 and 1999. Approximately 86% of these violations were monthly violations of the total coliform maximum contaminant level. OPH issued 56 administrative orders in calendar years 1998 and 1999.

Department of Natural Resources (DNR)

The Underground Injection Control (UIC) program is within DNR's Office of Conservation. R.S. 30: 4.1 authorizes the UIC program to regulate the drilling, casing, monitoring, and permitting of all disposal wells used to inject hazardous wastes and wastes associated with oil and gas production. The purpose of this program is to protect underground sources of drinking water through regulating injection and disposal well activities. This regulation includes approving permits to construct wells and inject wastes. In FY2000, DNR's UIC program budget was \$892,081 with 13 full-time staff.

**DNR's Mission Relating
to Water Quality**

*Provide regulations, surveillance,
and enforcement activities to ensure
the safety of the public and the
integrity of the environment*

Source: 2000 Executive Budget

The UIC program regulates five classes of wells. These wells and a description of what they are used for are shown on the following chart.

Exhibit 2
Description of DNR Well Classes

Class I	Wells used for industrial or municipal waste disposal of hazardous and nonhazardous materials.
Class II	Wells used for disposal of wastes associated with oil and gas activities (i.e., saltwater, drilling mud, etc.), injection wells associated with enhanced recovery of oil and gas, and wells used to facilitate the storage of hydrocarbons in solution-mined salt caverns.
Class III	Wells used for solution mining
Class IV	Wells injecting hazardous or radioactive wastes directly into a USDW (<i>these wells are now banned</i>)
Class V	Wells not covered under the above classes (i.e., aquifer remediation, return flow wells, etc.)

Source: Prepared by legislative auditor's staff using information from DNR, Office of Conservation.

For this audit, we only focused on well Classes I and II since Class I wells pose the greatest risk to ground water and Class II wells are the most prevalent. As of July 2000, there were 40 active Class I wells and 3,531 active Class II wells.

Monitoring Activities

DNR tests wells for mechanical integrity on a frequency dependent on the class of well. DNR also requires the well operators to submit annual (form UIC-10), monthly (form UIC-21), or quarterly (UIC-24) self-monitoring reports, depending on the class of well, indicating each well's compliance with permit limits. DNR issues permits for all wells that specify the well's maximum authorized surface injection pressure (MASIP), the minimum annulus pressure, and in some cases, the injection rate. The MASIP is important because if a well injects at a pressure higher than the allowed pressure, the operator runs the risk of fracturing the injection area and possibly allowing waste to enter underground sources of drinking water. The annulus pressure is also important because the annulus surrounds the injection tube provides an additional layer of protection. If the annulus pressure cannot be maintained, it could be an indication that the well's integrity is impaired. DNR checks this annulus pressure when it performs a mechanical integrity pressure test (MIPT) on inspections.

Enforcement Activities

R.S. 30:4.1 contains enforcement actions and penalties for violations of DNR laws, rules, and regulations. Enforcement actions include compliance orders, cease and desist orders and civil and criminal penalties. DNR also issues notices of violations (NOVs) when a well fails the MIPT test. The NOV instructs the operator to repair the well before resuming injection or plug and abandon the well. In calendar year 1999, there were 612 violations, with 207 of these being MIPT failures. The other types of violations include injection pressure violations, well sign violations, reporting violations and construction violations. For these violations, DNR issued 553 enforcement actions in 1999. Of these actions, 476 were notices of violation, 46 were

administrative orders, 30 resulted in sealing the well, and one resulted in severing the company's right to sell oil.

Department of Agriculture and Forestry (DAF)

R.S. 3:2 assigns the commissioner of DAF the responsibility to lead the department and direct all functions of the state relating to the advancement, promotion, and protection of agriculture and forestry. The Louisiana Pesticide Law, Chapter 20, provides laws governing the use of pesticides in the state. Part VI specifically addresses water protection through monitoring for pesticides in state waters. In FY2000, DAF's two main offices relating to water protection had 73 employees and a budget of over \$6.7 million. These offices are as follows:

**DAF's Mission Relating
to Water Quality**
*To protect water, land and related
resources of the state.*

Source: 2000 Executive Budget

- Office of Soil and Water Conservation provides technical assistance to land managers of local water conservation districts and oversees projects designed to reduce nonpoint source pollution.
- Office of Agricultural and Environmental Sciences performs pesticide inspections, samples water, and issues enforcement actions for pesticide violations.

Monitoring Activities

DAF conducts two main activities relating to water protection--water sampling for pesticides and inspection of pesticide applicators. Seventy inspectors distributed throughout DAF's seven district offices conduct water sampling. The inspectors conduct quarterly monitoring of 45 waterbodies. Inspectors take samples at each waterbody and send them to LSU Agriculture Center Laboratory for analysis. The laboratory analyzes for an array of pesticides specific to crops that grow near the sampled waterbody. If the laboratory results identify a problem, additional samples are taken upstream to determine its source.

Although inspectors are not required by law to conduct a certain number of inspections, DAF's unwritten policy is to inspect commercial applicators annually. Inspections can also be initiated following a complaint. The purpose of inspections is to inspect records, equipment and the physical site and to sample if necessary. Inspections also verify compliance with license and certification requirements. State law requires that persons who sell or apply pesticides be licensed or certified. There are currently about 3,500 certified pesticide applicators in Louisiana.

Enforcement Activities

State law provides for enforcement actions in certain pesticide violations. Some of the violations include knowingly operating faulty or unsafe equipment, refusing to or neglecting to keep required records, and selling to or supervising a person who does not have proper certification. DAF discovers violations through inspections and complaints, although most violations result from complaints. The most common violation is off-target drift. This occurs when aerial pesticide applicators apply pesticides that drift off the targeted field onto another area potentially

harming the other area. In calendar year 1999, DAF sent approximately 70 warning letters for off-target drift violations. Significant violations are brought to the Advisory Commission on Pesticides. This commission meets at least twice a year to evaluate violations and assess the penalties. In calendar year 1999, the commission held hearings that resulted in \$9,750 in penalties.

Department of Transportation and Development (DOTD)

R.S. 38:32 states that DOTD's Water Resources Program is required to plan the management of Louisiana's water resources on a statewide basis. Furthermore, its objective is to ensure that 100% of water wells installed meet the required standards for a safe and adequate supply of ground water. In FY2000, the Water Resources Program had 44 employees and a budget of \$4,095,331. However, these figures include other water programs not reviewed in this report, such as flood control programs.

DOTD's Mission

To effectively administer and implement projects affiliated with the control, development, conservation, and protection of Louisiana's water resources.

Source: 2000 Executive Budget

Monitoring Activities

DOTD's main activity relating to water protection is licensing water well drillers to ensure that water wells are constructed according to guidelines. There are currently about 140 active licensed drillers in Louisiana. These drillers drill about 4,200 and plug about 2,000 water wells annually. DOTD also registers all water wells in the state. After wells are registered, DOTD inspectors inspect the well to verify that it was constructed according to regulations. DOTD has nine inspectors throughout nine districts. Inspectors seldom revisit a water well following its official registration, unless there is a complaint. Inspectors also inspect plugged and abandoned water wells. EPA does not have any oversight or regulatory authority over DOTD's Water Resources Program. However, EPA standards are used as a guideline from which DOTD has developed a process for rules and regulations.

Enforcement Activities

State law and regulations authorize DOTD to issue compliance orders, civil and criminal penalties, and revocation of licenses for violations of state law. DOTD discovers these violations through inspector's site visit reports and through in-house file review of active drillers. Common driller violations include plugging and abandonment violations and improper grouting of annular space.

DOTD does not have formal enforcement criteria for specific violations. However, the enforcement staff uses its *Water Well Rules, Regulations, and Standards Handbook* to enforce violation and uses discretion on the severity of penalties. Act 122 of 1997 required drillers to obtain six hours of continuing education annually to renew their driller's license. Following this ruling, DOTD officials said that violations have decreased. In 1999, a total of 4,385 water wells were inspected by DOTD inspectors statewide. There were 234 violations, 210 of which were corrected, and 24 alleged violations still under review. This violation data was not captured in DOTD's computer database when we requested it. However, DOTD saw the usefulness of having this data captured electronically and began inputting this data in its database.

OTHER PROGRAMS

Total Maximum Daily Loads

Federal law requires DEQ to develop total maximum daily loads (TMDLs) for waterbodies that states designate as impaired waterbodies. TMDLs will allocate pollutant loads through all sources contributing to the waterbody's impairment. Currently, DEQ allocates pollutant loads through water discharge permits. However, nonpoint sources of pollution are not regulated. DEQ is required to develop TMDLs by 2007 for all impaired waterbodies but will develop TMDLs for the most impaired waterbodies first. The success and effectiveness of TMDLs will depend largely on the willingness and cooperation between regulated and nonregulated entities to reduce pollutant loads.

Nonpoint Source Pollution

Section 319 of the Clean Water Act authorizes state agencies to develop programs to address nonpoint source (NPS) pollution. NPS pollution results from rainfall or irrigation that runs over land or through the ground, picks up pollutants, and introduces them into ground water or other waterbodies. According to EPA, NPS pollution is the nation and state's largest contributor to water quality problems because it can occur any time that activities disturb the land or water and is not regulated.

DEQ is the lead agency for implementing Louisiana's Nonpoint Source Management Program. DEQ receives EPA grant money every year to implement and fund various nonpoint source projects around the state. DEQ selects projects that will benefit the most impaired waterbodies first. In 1998 and 1999, DEQ gave grants totaling \$3,953,745 for twelve NPS projects. Appendix E lists the projects funded.

Since agriculture is a major contributor to NPS, DAF works with 43 local soil and water conservation districts to implement best management practices and education projects. These districts include both DAF employees and United States Department of Agriculture personnel. According to DAF documents, DAF has implemented 216 best management practices designed to reduce soil erosion and improve irrigation and water quality.

Source Water Assessment Program

Louisiana DHH entered into an interagency agreement with DEQ to develop and implement this program with funds from the Federal Drinking Water State Revolving Fund Grant. This program evaluates source water that provides drinking water to each public water supply system in Louisiana. The evaluation will determine the degree to which a public water supply is either protected from, or susceptible to, contamination. Agencies will use this assessment to implement protection measures such as best management practices, contingency planning, and public education.

Wellhead Protection Program (WHPP)

EPA funded these state programs to protect public water supplies from contamination. DEQ delineates wellhead protection areas (defined as the surface and subsurface areas around water supply wells through which contaminants are likely to move) to ensure that these areas are protected from contamination. This enables each community's water system to inventory,

inspect and control potential sources of contamination. Over the last eight years, 125 communities have implemented WHPPs. All WHPPs must meet a minimum set of standards to obtain state approval, but each program is unique to the community in which it is developed.

Boards and Commissions

There are currently nine active state boards and commissions relating to water quality. All of the entities involve participation by at least one of the five departments reviewed for this audit. However, none of the entities are responsible for coordinating the efforts of all five departments. The boards and commissions that we identified are as follows:

- Louisiana Environmental Education Commission
- Task Force on Environmental Protection and Preservation
- Advisory Committee on the Regulation and Control of Water Well Drillers
- Advisory Commission on Pesticides
- State Soil and Water Conservation Committee
- Ground Water Advisory Group
- Nonpoint Source Interagency Committee
- Lower Mississippi River Conservation Committee
- Lake Pontchartrain Basin Foundation

Section I: Do individual state regulatory programs meet or exceed minimum EPA standards for drinking water and surface water?

We found that four of the state departments we reviewed have regulatory programs that met the minimum United States Environmental Protection Agency (EPA) standards for drinking and surface water. All of these departments have obtained primacy from the EPA to oversee the respective program. For states to receive primacy for EPA programs, the state program and its legal requirements must be at least as stringent as EPA's requirements. EPA conducts annual or semiannual reviews of each agency's program to ensure that states are following and maintaining these requirements.

To determine if each agency's program met EPA standards, we reviewed federal laws and regulations and compared them to state laws and regulations. We did not find any instances where the state's requirements did not meet the federal ones. However, as stated above, the state's requirements must be at least as stringent as the federal requirements for states to receive and maintain primacy. Yet, EPA audit findings (see Appendix D) show that some departmental programs often have insufficient monitoring and enforcement procedures. Our specific findings relating to these procedures are discussed later in this report.

Exhibit 3 below describes each water quality program that departments have primacy for, the date that primacy was attained, the number of EPA reviews conducted annually, and the federal act governing the program.

Exhibit 3
Louisiana Water Quality Programs and Federal Oversight

Department	Program	Primacy Effective Date	EPA Annual Reviews	Federal Act
Environmental Quality	National Pollutant Discharge Elimination System	1996	2 per year	Clean Water Act
Office of Public Health	Safe Drinking Water Program	1977	1 per year	Safe Drinking Water Act
Natural Resources	Underground Injection Control Program	1982	2 per year	Safe Drinking Water Act
Agriculture and Forestry	Federal Insecticide, Fungicide and Rodenticide Work Program	1979	2 per year	Federal Insecticide Fungicide and Rodenticide Act

Source: Prepared by legislative auditor's staff from data collected from departmental officials.

Section II: Does Louisiana have an effective monitoring program for drinking water and surface water?

Generally, Louisiana’s four state departments that are responsible for water quality do not always have sufficient monitoring programs to ensure that the state’s water is protected. As a result, these monitoring programs may not be as effective as they could be. We defined “effective” as whether agencies were following requirements and procedures outlined in federal and state laws that are intended to protect state waters.

All four departments with water quality responsibilities have monitoring programs designed to protect water quality. Most of these monitoring programs rely heavily on individuals or entities to monitor themselves through permit, legal and other requirements with occasional inspections or reviews by the regulatory agencies. Specifically, all of these monitoring programs involve at least one of the following two activities:

1. Physical inspection of the person or entity regulated to verify compliance with permits or other requirements
2. Review of self-monitoring data that entities or persons keep to prove daily compliance with permits or other requirements

Exhibit 4 summarizes by department whether these two activities are effective at protecting water quality.

Exhibit 4
Summary of Effectiveness of Monitoring Programs

Department	Area Regulated	Inspections Effective?	Self- Monitoring Effective?	Other Effective?
Environmental Quality	Facilities discharging wastes to state waters	INSUFFICIENT, not always inspected	YES for major facilities NO for minors	Noncommercial laboratories not accredited
Office of Public Health	Water systems providing drinking water to public	IMPROVING, Delinquent in past	YES, state collects most samples. Some inaccuracies in the number of samples collected.	Inconsistent monitoring due to organizational structure
Natural Resources	Facilities/operators injecting wastes underground	INSUFFICIENT for Class I and Class II commercial wells	NO, has 2-year backlog reviewing reports	N/A
Agriculture and Forestry	Persons who apply and sell pesticides	INSUFFICIENT, inspection policy is unwritten and inspections are difficult to track.	NOT REQUIRED, DAF does not require submittal of monitoring data.	N/A

Source: Prepared by legislative auditor’s staff using results from file reviews.

Overall, these departments do not always follow requirements and procedures designed to help ensure that Louisiana waters are protected. However, we did find that Louisiana's drinking water is generally safe because of effective monitoring by OPH.

DEQ, DNR, and DAF all regulate activities that may potentially pose a risk to surface water or groundwater. As the exhibit illustrates, these departments all have deficiencies regarding effectiveness of inspections and reliability of self-monitoring data. For example, we found that DEQ and DNR do not always inspect facilities when they should. In addition, DEQ does not thoroughly review self-monitoring data for minor facilities and DNR has a two-year backlog of unreviewed self-monitoring data. Furthermore, unlike other regulatory agencies, DAF does not require that self-monitoring data be submitted for review.

The following sections relate to individual departments.

Department of Environmental Quality

34% of Major and Significant Minor Facilities Not Inspected According to Law

We reviewed inspection dates since fiscal year 1996 for 198 major permits and 92-500 minor permits (municipal permits that receive federal grant funds under the Clean Water Act). We only reviewed those major and 92-500 minor permits for which DEQ has enforcement authority, since EPA still retains enforcement authority over some permits. We found that DEQ has not inspected 68 (34%) of these facilities according to state law over this time period. In addition, 31 (15%) of these facilities have missed at least two inspections. For example, Borden Chemical missed three inspections from FY1996 to FY1998. Facilities with major permits discharge over one million gallons of wastewater a day. Therefore, the volume of wastewater discharged makes it important for DEQ to inspect them according to schedule.

R.S. 30:2012 requires that DEQ inspect major facilities at least once a year. These inspections are important because they verify compliance with permit limits. Permit limits specify maximum and minimum levels of substances that the facility is authorized to discharge. These limits also help ensure that facilities discharge safe amounts of permitted substances into state waters. If DEQ is not inspecting these facilities as required, the department may not be ensuring that these facilities are complying with their permits. As a result, DEQ is not protecting state waters as well as it could.

According to a DEQ official, this annual requirement is not always met because of uncontrollable factors. For example, DEQ may find a significant problem at one facility and have to inspect that facility several times. DEQ may also have to respond to emergencies and other incidents that are time-consuming.

DEQ appears to be improving on inspection frequency when inspections are evaluated on an annual basis. Exhibit 5 below shows the number of inspections not conducted each year since FY1996.

Exhibit 5
DEQ Inspections Required But Not Conducted

Fiscal Year	Number Required	Number Not Conducted	Percent Not Conducted
1996	195	48	24%
1997	195	25	13%
1998	196	13	7%
1999	197	17	9%
2000	198	8	4%

Source: Prepared by legislative auditor's staff using information from DEQ.

As Exhibit 5 illustrates, DEQ has improved over the past five fiscal years in meeting the required annual inspection frequency.

Legislative Auditor's Additional Comments: DEQ's response states that some of these facilities were inspected every year but missed the fiscal year timeframe by a few weeks. DEQ's policy goal as stated in the Enforcement Management System document is to inspect all major facilities at least once every fiscal year. Therefore, we used fiscal years to calculate whether DEQ conducted these inspections.

10% of Minor Facilities May Have Never Been Inspected

We examined data on inspection dates from 1990 to 1999 on the total population of minor permits (approximately 6,131) and found that DEQ has never inspected 10% of the facilities that required an inspection. However, some of these facilities may have been inspected by DEQ in the year 2000. Because our data only covered 1990 to November 1999, we could not determine whether DEQ inspected those facilities in 2000. Using these data, we also reviewed all inspection dates for those facilities inspected since FY1996 and found that 7% of these facilities were not inspected as frequently as required by DEQ policy. DEQ policy requires that minor facilities be inspected once every three years.

Most of the facilities that have never been inspected are stormwater permits that, according to DEQ, are not a high priority compared to other permits. Uncontrollable factors also affect whether minor facilities are inspected every three years. While minor facilities do not pose the same risks as major facilities, the sheer number of these permits makes it important for DEQ to inspect them. If

DEQ does not inspect these facilities, the department is allowing these facilities to operate with little or no regulation. These inspections are especially important for minor facilities since DEQ does not always review self-monitoring data submitted by minor facilities.

Recommendation

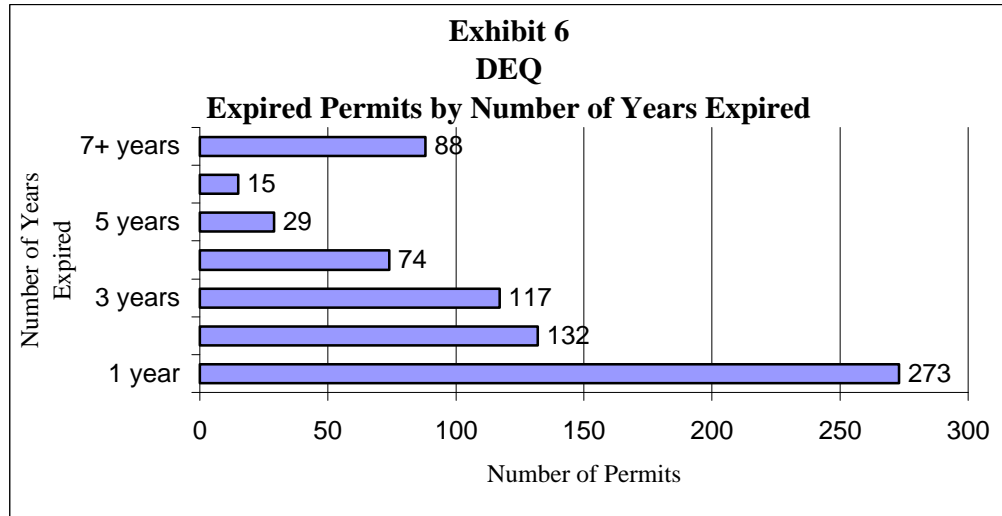
Recommendation II-1: DEQ should ensure that its inspectors conduct all inspections at the frequency required by its policies and procedures.

DEQ Response: DEQ recently underwent reengineering and surveillance staff are being cross-trained to do inspections for more than one medium.

Legislative Auditor's Additional Comments: DEQ provided additional information subsequent to our fieldwork. Based on this additional information, some of the inspections we identified as "never conducted" as of November 1999 may have been conducted in 2000.

54% of Major Permits and 10% of Minor Permits Are Expired

Using data obtained from DEQ containing issue dates for all major and minor permits, we determined that 54% (109 of 201) of major permits and 10% (619 of 6,131) of minor permits are expired. Water discharge permits are valid for five years. After five years, a facility must reapply to DEQ to renew its permit. However, if a facility submits the application at least 180 days before the permit expiration date, state regulations allow the facility to continue operating under the expired permit conditions until DEQ can reissue the permit. However, these continuations may result in DEQ not reissuing permits for several years. For example, one of Exxon's major permits expired in 1979 and has not been renewed.



Source: Prepared by legislative auditor's staff using data from DEQ.

Note: Includes both minor and major permits.

According to DEQ staff, the permit backlog is the result of DEQ receiving primacy for the National Pollutant Discharge Elimination System (NPDES) permit program from EPA in 1996. DEQ had to revise all major permits and begin issuing minor permits under EPA guidelines. However, DEQ's untimely reissuance of permits may result in facilities operating under outdated or less stringent water quality standards. EPA and DEQ review water quality standards every three years to determine if modifications are needed.

DEQ Comments: According to DEQ, the expired Exxon permit is under EPA's jurisdiction.

Minor Facilities Self-Monitoring Data Do Not Appear to Be Reviewed by DEQ

DEQ does not appear to be reviewing minor facilities' self-monitoring reports to ensure that they are in compliance with permit limits. We were unable to determine what the official policy was regarding reviewing monitoring information from minor facilities. DEQ staff gave us conflicting procedures for this review. However, we did not see any evidence in our file review that indicated that these monitoring reports are reviewed for violations. In addition, DEQ does not track these reports to ensure that all required reports have been submitted. We reviewed 42 minor facilities' permit files and found that these facilities were required to submit 715 monitoring reports in 1998 and 1999. However, these facilities did not submit 153 (21%) of the required reports.

Each discharge permit specifies the types and amounts of substances that facilities can discharge into state waterbodies. These amounts are based on water quality standards adopted by DEQ and approved by EPA. These permits also require the facility to monitor the discharge to ensure that the substances in the discharge do not exceed the levels specified in the permit. Facilities must submit these self-monitoring reports to DEQ either monthly, quarterly, semiannually, or annually. For major permits, DEQ reviews the reports for completeness and enters the data into the national Permit Compliance System (PCS) database. The computer then analyzes the data and determines whether effluent violations exist.

Since our file review showed that DEQ does not review the self-monitoring reports for minor facilities, DEQ does not know if or when violations of permit limitations occur. As a result, DEQ is not sufficiently ensuring the minor facilities do not violate their permit limits. This, coupled with the fact that 10% of minor facilities may have never been inspected, shows that these facilities are largely unregulated.

Neither state law nor EPA requires that DEQ review self-reported monitoring data. EPA recommends, but does not require, that states input self-monitoring data from minor facilities into the PCS. This system is a national EPA database where states enter permit limits and enforcement and monitoring data on major facilities. EPA encourages states to enter this same data on minor facilities as resources allow. DEQ has entered some information on some minor facilities into PCS, but PCS does not contain permit limits for all minor permits.

We surveyed eight other states and found that five do input monitoring information from minor facilities into this system. However, some of these states do not have the number of permits that Louisiana has. Alabama was the only state with a number of permits comparable to Louisiana. Alabama has almost 8,000 minor permits, but only 2,600 of the permits are entered into PCS. However, even though all minors are not in PCS, according to an Alabama department official, Alabama manually reviews all self-monitoring reports for all minor permits.

Recommendations

Recommendation II-2: DEQ should at least spot check self-monitoring data for minor facilities. DEQ could also implement a priority system for reviewing self-monitoring data for facilities that are consistently out of compliance. When resources allow, DEQ should begin entering more permit limits on minor facilities into the PCS.

DEQ Response: DEQ agrees that the department could do a better job of reviewing monitoring data for minor facilities.

Recommendation II-3: DEQ should implement electronic submission of discharge monitoring reports. This may result in a more efficient review of self-monitoring data.

DEQ Response: DEQ states that within 18 months, the department will be able to accept all data electronically.

DEQ Does Not Accredit In-House Laboratories

DEQ's Laboratory Accreditation Program accredits laboratories that submit samples from permitted facilities that prove compliance with water discharge permits. According to state regulations, the laboratory accreditation program is designed to ensure the accuracy, precision and reliability of the results generated, as well as the use of department approved methodologies in the generation of those results. Laboratory accreditation staff currently inspect these laboratories every three years to ensure that all methodologies are approved and followed. However, Section 4501 of the Louisiana Administrative Code and R.S. 30:2011(22)(a) only apply to accreditation of commercial laboratories. Therefore, noncommercial laboratories, such as the in-house laboratories at Exxon and other large facilities, are not accredited by DEQ. According to the Administrator of DEQ's Laboratory Accreditation Program, there are approximately 1,000 of these in-house laboratories in Louisiana.

These noncommercial (in-house) laboratories analyze their own facility's water samples and submit the results to DEQ. However, since DEQ does not accredit these laboratories, laboratory staff do not inspect the laboratory to ensure that laboratory methods will ensure accurate and reliable data. DEQ compliance inspectors do inspect laboratories as part of the facility's annual compliance inspection. However, these inspections are not as complex as the accreditation inspections are. Because DEQ is not accrediting in-house laboratories, it is not ensuring that data from the facilities that produce large amounts of waste in the state is accurate. In addition, some data submitted from these laboratories may be less reliable than data submitted from accredited labs. Without accurate data, it may be impossible for DEQ to determine if these facilities are in violation of their water discharge permits.

Matter for Legislative Consideration 1

The legislature may wish to amend R.S. 30:2011(22)(a) to also include accreditation of noncommercial laboratories. This would help ensure that data submitted from these laboratories are more reliable and accurate.

OFFICE OF PUBLIC HEALTH

Organizational Structure Leads to Inconsistent Monitoring; Difficulties in Tracking Funding

The current organizational structure of the Safe Drinking Water Program within Office of Public Health does not allow the Central Office administrative control over the entire program. This lack of control leads to inconsistent application of monitoring activities in the district and regional offices. It also leads to inconsistent application of regulations. See Appendix F for a diagram of the organizational structure.

The Central Office is located within Engineering Services in the Division of Environmental Health, the regional and district offices are located in the Division of Community Health, and the laboratories are located in the Division of Laboratory Services. See Appendix G for a description of the district and regional offices and the parishes they encompass. The Central Office is responsible for developing program policy and procedures. It is also responsible for reporting the program's activities and use of the federal grant to EPA. The district and regional offices are responsible for the implementation of the program. However, as depicted in Appendix F, the Central Office has no line authority over the district and regional offices. In other words, the people that are ultimately responsible for the program (the Central Office) have no authority over the people responsible for implementing the program. Therefore, the potential for inconsistent implementation of the program, including monitoring and enforcement activities, exists.

The United States General Accounting Office in the *Standards for Internal Control for Federal Governments* states that an agency's organizational structure affects the internal control environment. It defines a good internal control environment as one that clearly defines key areas of authority and responsibility and establishes appropriate lines of reporting.

OPH's organizational structure encourages inefficiencies and inconsistencies within the program. The Safe Drinking Water Program is subject to the discretion of the regional administrators when it comes to issues such as hiring new staff, implementing new computer software, providing training for program staff, what programs the clerical staff work on and budget issues.

According to some OPH personnel, this organizational structure forces Safe Drinking Water Program personnel to rely on personal relationships with regional administrators in order for the program to run smoothly. OPH staff said that they spend a significant amount of their time cultivating personal relationships with the people that have authority over their program and their staff. For instance, the Central Office establishes that a regional office needs a new computer and a new

printer and they have set aside part of the Safe Drinking Water Program funds to buy the equipment. Central Office staff must persuade OPH staff responsible for creating the budget to add those funds to the regional office's budget. It then becomes the regional administrator's decision to use those funds to buy a new computer and printer for the Safe Drinking Water Program. There is no guarantee that the regional administrator will buy the computer for the program. Another example involves staff training programs. For instance, if the Central Office conducts a training class for a new regulation and wants the regional and district staff (the people that will be implementing the new regulation) to attend, they must obtain the permission of the regional administrator. The regional administrator controls the budget that pays for the regional/district staff to travel to training. Because of the differences among regions, monitoring programs may differ from region to region. Regional administrators oversee a regional office and a budget that incorporate programs such as the Safe Drinking Water Program, the parish health units, children's special health services, sexually transmitted disease clinics, food and drug programs, audiology programs, social services, nutrition services, and various other programs.

This structure also leads to inconsistencies within districts and regions. For instance, it is possible for a regional office to use a different computer software package than other regional offices and the Central Office. This makes sharing information and documents a difficult, if not sometime impossible, task. There are also differences in the responsibilities of clerical staff assigned to the Safe Drinking Water Program. In one region, the clerical staff may spend over 50% of their time on other programs such as food or dairy because the regional administrator has decided that is where they are needed. In another region, the clerical staff may spend 100% of their time on drinking water and other engineering services. This can create inconsistencies in the monitoring support functions, such as the upkeep of the files, routine correspondence, and computer database entries from region to region.

Furthermore, we noted that some districts are more likely to be in compliance with or ahead of monitoring goals than others are. For example, the Shreveport district was the most up-to-date district in conducting sanitary surveys and the New Orleans district was the most delinquent in conducting these surveys. With the existence of a centralized organizational structure, best management practices could easily be shared between districts so that they could learn from each other.

Another effect of the decentralized organizational structure is that the Central Office has not produced a standard operating procedures guide for the regional/district offices. Instead it issues memoranda to announce a new policy or procedure. OPH began devising an operations manual in 1990; however, the effort was abandoned and any updates since then have been done by memoranda and not in a formalized operations manual. The lack of a standard operating procedures guide can further contribute to the inconsistent implementation of monitoring activities from region to region.

The effects of this structure are far reaching. EPA has requested in its audits that OPH do a better job of tracking how safe drinking water funds are spent at the regional levels. EPA has also suggested that OPH consider a more centralized organizational structure to promote consistency between regions and a more effective and efficient program.

Recommendations

Recommendation II-4: OPH should implement a centralized structure with regional and district staff reporting directly to the Central Office.

DHH/OPH Response: OPH disagrees with this recommendation and will continue the current organizational structure of regional administrators and center directors adopted on November 1, 2000. OPH believes that this new structure is the most effective and efficient structure.

Legislative Auditor's Additional Comments: The structure adopted on November 1, 2000, does not change the fact that the regional offices are still located in a separate center (formerly division) than the Engineering Services Central Office. The 1998 and 1999 EPA audits of the public water supply supervision program (Safe Drinking Water Program) recommend that DHH consider becoming a more centralized organization with regional staff dedicated solely to conducting drinking water activities, and that regional drinking water staff report directly to the management at the Central Office. The EPA audit also stated that the other states in EPA Region VI have become more centralized organizations and resulted in improved coordination and communication of drinking water program priorities.

Recommendation II-5: The Assistant Secretary should facilitate the sharing of best management practices among districts, if the office is not restructured.

DHH/OPH Response: OPH stated that since spring 2000 the regional office Engineering Services staff has been meeting regularly with Central Office staff in quarterly meetings to share and standardize procedures.

Recommendation II-6: The Central Office in Engineering Services should develop a standard policies and procedures manual for the district and regional offices to help promote standardization.

DHH/OPH Response: OPH agrees with this recommendation and plans to completely overhaul the *Standard Operating Procedures Manual*.

Recommendation II-7: OPH's Engineering Services should provide training to the district and regional offices on the importance of maintaining the Safe Drinking Water database.

DHH/OPH Response: OPH did not directly respond to this recommendation. Its response discusses the new database system that should be fully implemented by January 2001. In addition, OPH stated that since the Safe Drinking Water Program staff is being increased because of a corresponding increase in the federal program, sufficient clerical staff to meet the input requirements for the database should soon be available.

The Number of Routine and Repeat Samples Collected Were Sometimes Inaccurate According to Our File Review

A large part of the monitoring function of the Safe Drinking Water Program is sample collection. We found inconsistencies with sample collection among the districts during our file review. The Lafayette District and the New Orleans District had the most problems collecting the correct number of routine and repeat samples for compliance with monitoring standards. In the Lafayette District, we found that the incorrect number of routine samples was collected for 44% of the systems in our sample. The incorrect number of repeat samples was collected for 25% of the systems. In the New Orleans District, the incorrect number of routine samples was collected for 27% of the systems in our sample. The incorrect number of repeat samples was collected for 13% of the systems. However, we were unable to determine if the correct number of repeat samples was collected for 27% of the systems in the New Orleans District because of the manner in which non-state laboratories report sample analysis results. In addition, we found staff in one district was unaware that their largest system had not submitted sample results since June of 1999. This system uses a private lab and had run out of reporting forms and therefore had stopped submitting sample results. These missing reports were only noticed when we began our audit work in that district.

The federal Primary Drinking Water Guidelines require a certain number of routine samples to be collected monthly dependent upon the population served by the water system. The guidelines state that the public water systems are ultimately responsible for the collection of the samples; however, in Louisiana, the majority of samples are collected by state sanitarians. The guidelines also require a certain number of repeat samples to be collected depending on the number of samples that test positive for total coliform and the total number of routine samples collected.

OPH staff in the Lafayette District attributed the cause of these problems to relatively new and inadequately trained sanitarians who are responsible for sample collection. The district plans on providing additional training to these sanitarians. In the New Orleans District, the public water systems usually collect their own samples unlike the majority of the state where sanitarians collect samples. This could contribute to the problems with sample collection in this district.

In addition to being out of compliance with federal and state regulations, the failure to collect the correct number of samples and the failure to notice the lack of submittal of laboratory reports could hinder the state's ability to determine if drinking water is potable.

Recommendations

Recommendation II-8: OPH district and regional staff should ensure that the correct number of samples are collected.

DHH/OPH Response: OPH responded that it will implement enhanced staff training and unscheduled internal audits. OPH also stated that it has relied on EPA audits for data verification and the EPA audits have not shown major deficiencies in sample collection.

Legislative Auditor's Additional Comments: If the EPA audits do not cover the same data that this performance audit covered, i.e., actual sample analysis reports, then the internal audits should cover these data.

Recommendation II-9: OPH's Engineering Services New Orleans District should issue monitoring violations to those public water systems that do not collect the correct samples.

DHH/OPH Response: OPH responded that it relies on EPA audits for deficiency verification and the annual EPA audits have not cited any major deficiencies in monitoring, other than a chronic staff shortage.

Recommendation II-10: OPH's Engineering Services Lafayette District should continue its efforts to train the parish sanitarians in sample collection techniques.

DHH/OPH Response: OPH agrees with this recommendation and states that a standardized formal training program for all sanitarians that includes sample collection training was implemented in 2000.

Problems Created From Non-State Laboratory Reporting Methods

It is impossible to determine if the correct routine and repeat samples were collected for some public water systems that use non-state laboratories. For example, unlike the state laboratories that submit a one-page analysis report for each sample submitted, some of the non-state laboratories submit a one page report that contains only the total number of samples collected and the total number of samples that tested positive for total or fecal coliform. Non-state laboratories are laboratories that are not owned by the state but instead are owned by a public water supply system or a municipality.

The federal Primary Drinking Water Guidelines require a certain number of routine samples to be collected monthly dependent upon the population served by the water system. The guidelines also require that the samples be collected from sites that are representative of water throughout the distribution system. The guidelines further require a certain number of repeat samples to be collected depending on the number of positive routine samples and the total number of routine samples collected. Louisiana has adopted these regulations verbatim in the Sanitary Code.

The method in which some of the non-state laboratories report bacteriological sample results makes it difficult for OPH personnel to determine if the correct routine and repeat sample results were collected. These reports are also sometimes difficult for OPH staff to interpret. See an example of a state laboratory report and a non-state laboratory report in Appendix H.

In addition to being out of compliance with federal and state regulations, the failure to collect the correct number of samples could hinder the state's ability to determine if drinking water is potable.

Recommendation

Recommendation II-11: The Laboratory Certification program should require non-state owned laboratories to use the same forms that the state laboratories use, or use forms that contain the same information as the state forms. In addition, results should be reported for each sample collected, not just summary totals.

DHH/OPH Response: OPH agrees with this recommendation and has initiated this procedure.

Louisiana Does Not Require Water Systems to Pay for Any Sampling or Monitoring Costs

According to OPH personnel, Louisiana is the only state that conducts all inspections, tests and other necessary procedures free of charge for all public water systems. OPH staff collect monthly samples from public water systems and send the samples to OPH laboratories where they are analyzed at no cost to the system in order to determine compliance with the federal Primary Drinking Water Regulations. These samples are collected and analyzed in order to ensure that the drinking water supplied to the public is safe. This is one of the main reasons that the Safe Drinking Water Program has an effective monitoring program.

In the 2000 First Extraordinary Session, the legislature passed a fee of \$3.20 per connection to be paid by consumers and collected by public water systems. Ten percent of the fee is retained by the water systems; the rest is submitted to OPH. The law requires the fee to be collected from consumers rather than water systems because R.S. 40:5.6 requires the state to conduct all regulation-related services at no cost to the systems. If monies collected from this fee are used as a supplement to the Safe Drinking Water Program and not as a replacement for monies from the state General Fund, the monies will help offset the costs of sample collection and analysis for drinking water.

R.S. 40:5.6 states that OPH shall perform all inspections, tests, or procedures on public water supplies at no cost to any municipality, parish governing authority, or any public or privately owned water system. However, state law and regulations (based upon the federal Primary Drinking Water Standards) hold the public water supplies responsible for compliance with sampling requirements, but because of this state law the systems do not have to pay for the sample analysis. In comparison, DEQ charges all facilities (including publicly owned facilities) that hold discharge permits (NPDES program) an annual maintenance and surveillance fee to offset the cost of monitoring and inspecting those facilities.

The executive director of the Louisiana Municipal Association (LMA) stated that the LMA does not believe that local government should pay for state functions and it believes that the protection of drinking water is a state function. Although publicly owned water systems make up only 27% of the water systems, they serve 65% of the population. Privately owned water systems make up 73% of all water systems, but they serve only 35% of the population.

As a result of their inability to charge fees to the water systems for services provided by the state that the systems are responsible for conducting, the Safe Drinking Water Program must rely on funding from the state General Fund. However, it is because the state conducts the monitoring and sampling for the systems that Louisiana has an effective monitoring program. Without the funds to run an effective program, the quality of the drinking water in the state could be jeopardized.

Matter for Legislative Consideration 2

The legislature should consider repealing R.S. 40:5.6, which prohibits OPH from charging public water systems a fee for regulatory activities.

DHH/OPH Response: OPH agrees with this matter.

Sanitary Survey Computer Data Are Often Inaccurate

We found that the level of accuracy of the computer data varied by district. The data were most inaccurate in the Shreveport District and the most accurate in the Baton Rouge District. We found that the date of the most recent sanitary survey was inaccurate for all public water systems in our sample for the Shreveport District. The data were accurate for 84% of the public water systems in our sample in the Baton Rouge District, 73% in the New Orleans District, and 69% in the Lafayette District.

According to OPH policy, district and regional staff are supposed to enter certain information into the Safe Drinking Water Database. This information includes the most recent sanitary survey date, the system's active or inactive status, and inventory information.

In the Shreveport District, there is only one computer with the Safe Drinking Water Database. It is a general access computer and it is inconvenient and difficult for personnel to access on a routine basis. Also, it may be that personnel in the district offices do not realize the importance of keeping the database current and therefore it is not a high priority.

Without a centralized database, OPH would be forced to rely on separate databases kept at the district and regional offices. An accurate, centralized database is important for efficient and effective operations.

As a result, the Safe Drinking Water Program has a computer database that is largely inaccurate and unreliable. For instance, when OPH reports the number of sanitary surveys conducted annually to EPA, it must rely on activity reports submitted by the districts and regions rather than its database. If the database was accurate, the office could provide this information to EPA quickly and would be able to identify which systems were surveyed rather than just totals by region.

The Safe Drinking Water Program is in the process of implementing a new Oracle based computer system. However, if the problems with the current system are largely due to failure to enter data at the regional and district levels, a new computer system will not correct those problems.

Sanitary Surveys Were Often Delinquent

We found that only 53% of the systems in our overall sample had had more than one sanitary survey conducted in the past five years for surface water systems and in the past ten years for groundwater systems. This means that almost half of the systems in our sample had only one survey conducted when they should have had at least three conducted.

The New Orleans District was the furthest behind in conducting sanitary surveys. In our judgmental sample, 87% of the New Orleans District public water systems were overdue for a sanitary survey. The Lafayette District was also behind in conducting sanitary surveys. In our sample, 75% of the Lafayette District public water systems were overdue for a sanitary survey. The Shreveport District was the most up-to-date in conducting sanitary surveys. Only 5% of the public water systems in our sample in the Shreveport District were overdue for a sanitary survey.

According to the workplan submitted by OPH to EPA, sanitary surveys must be conducted annually for surface water systems and once every three years for groundwater systems. Sanitary surveys enable the state to determine if the public water system is able to produce potable drinking water. The survey determines if the system is in compliance with the state Sanitary Code and the Safe Drinking Water Act.

We were told that the reason for the differences in the districts and current status of sanitary surveys was probably related to staffing levels. However, our own analysis of staffing levels shows levels to be similar from district to district based on the number of systems in that district. Perhaps the cause is differences in the duties/responsibilities of staff in the different districts.

EPA has repeatedly addressed this issue in its annual program reviews. OPH has made a commitment to increase the number of sanitary surveys recently and EPA officials said they are on target for the current year.

EPA attributed the reason for the delinquencies to staff vacancies and an over ambitious goal. OPH has set a more frequent rate of sanitary surveys as a goal than the federal Primary Drinking Water Regulations require. The federal regulations require that sanitary surveys be conducted once every three years for community surface water systems, once every five years for non-community surface water systems, once every five years for community groundwater systems, and once every ten years for non-community groundwater systems. OPH's goal for conducting sanitary surveys is annually for all surface water systems and once every three years for all ground water systems. EPA holds the office to its stated goal because it is a part of the workplan agreement between EPA and OPH.

Without the sanitary surveys, the state is only monitoring the output of the water systems, not the processes themselves. By not monitoring the processes, the state could be missing an opportunity to ensure the quality of the drinking water supplied to the users of the water system.

Recommendation

Recommendation II-12: OPH should continue striving to meet the sanitary survey goals in the EPA workplan.

DHH/OPH Response: OPH plans to revise its sanitary survey goals in the EPA workplan.

DEPARTMENT OF NATURAL RESOURCES

DNR Not Inspecting Injection Wells According to Policies

DNR did not conduct 24% of the required inspections for the wells in our sample in fiscal years 1998 and 1999. We reviewed a sample of 33 injection well files to determine if DNR conducted the required inspections. According to DNR staff, inspectors did not conduct all required inspections because of staff shortages during this time. Exhibit 7 below shows the inspection requirements and the number of inspections not conducted in fiscal years 1998 and 1999.

Exhibit 7

DNR Inspection Requirements and Number of Inspections Conducted in FY 1998 and 1999

Type of Well	Number in Sample	Frequency of Inspections Per Year	Inspections Required in FY's 1998 and 1999	Inspections Not Conducted in FY's 1998 and 1999	Percent of Inspections Not Conducted in FY's 1998 and 1999	Number of Total Wells	
						1998	1999
Class I Commercial	3	4	24	8	33%	3	3
Class I Noncommercial	7	2	28	8	29%	40	38
Class II Commercial	10	2*	40	9	23%	41	34
Class II Noncommercial	13	1 every five years	13	0	0%	3,444	3,468
TOTALS	33		105	25	24%		

Source: Prepared by legislative auditor's staff using information obtained from DNR.

***Note:** DNR does not have a written policy on the frequency of inspections for Class II commercial wells. The department has stated that it has at least two inspections per year.

DNR conducts inspections to determine if the injection well is in compliance with its permit and if it is operating properly. During the inspection, DNR inspectors witness a Mechanical Integrity Pressure Test and review monitoring records (for some wells). This test ensures that the well maintains sufficient pressure and is functioning properly. DNR must conduct this test at a minimum pressure of 500 pounds per square inch (psi) for Class I commercial and noncommercial wells to ensure consistency between tests. However, we found that inspectors conducted this test at a pressure lower than 500 psi on eight inspections of Class I wells.

DNR does not have a written policy on the frequency of inspections for Class II commercial wells. State regulations do not differentiate between commercial and noncommercial Class II wells regarding testing frequency. However, according to DNR personnel, they have an unwritten policy to conduct at least two

inspections and Mechanical Integrity Pressure Tests per year for Class II commercial wells.

Since DNR did not conduct 24% of the required inspections in FY98-99, DNR is not complying with its policies. In addition, DNR is not adequately ensuring that injection wells are properly maintained.

RECOMMENDATIONS

Recommendation II-13: DNR should ensure that inspectors conduct all required inspections in accordance with its policies and procedures.

DNR Response: DNR agrees with this recommendation.

Recommendation II-14: DNR should amend its regulations to include a policy on the frequency of inspections and Mechanical Integrity Pressure Tests for facilities with Class II commercial wells.

DNR Response: DNR partially agrees but would rather implement a standard operating procedures manual than amend state regulations.

Some Monitoring Reports Not Submitted for Class II Wells

In our sample of 23 Class II injection wells, we found that well operators did not submit 20% of the required monitoring reports in FY's 1998 and 1999. DNR policy requires that injection well operators report self-monitoring data annually. This annual report shows the well's average and maximum injection pressure, injection rate, and annulus pressure for the year. DNR reviews these reports to determine if any facility exceeded its permit limits.

DNR does not know that these reports have not been submitted, because the department is two years behind in reviewing these reports. Not only is DNR unaware that required monitoring reports have not been submitted, but it also does not know of violations reported on these reports. We found that two reports in our sample had violations; however, DNR has not reviewed these reports yet.

As a result, this backlog allows noncompliant facilities to continue to violate their permit without DNR taking timely enforcement action. In addition, DNR does not know if facilities have even submitted these reports until two years later. This backlog may be due to shortage of staff since one person is responsible for entering all reports.

Recommendation

Recommendation II-15: DNR should implement electronic submission of self-monitoring reports. This may help to reduce the two-year backlog in reviewing those reports.

DNR Response: DNR stated that electronic submission of reports will not improve a backlog of report review if manpower is not available to review the submitted information.

Legislative Auditor's Additional Response: Electronic submission of reports would enable the computer database to compare reported limits to permitted limits and generate exception reports for those wells with permit violations. As a result, DNR staff would only have to review the data that show deviations from permitted limits.

Monitoring Reports From Class II Commercial Wells Not Reviewed Completely; Some Contain False Information

DNR requires that all Class II commercial wells submit monthly reports. These monthly reports show the daily injection pressure, injection rate, and annulus pressure. DNR just began reviewing these reports in January of 1999. However, DNR only reviews the annulus pressure to determine if the pressure ever dropped below 100 psi. DNR does not review the injection pressure to determine if it exceeded the maximum authorized surface injection pressure. The injection pressure is important because if an operator exceeds this pressure, the additional pressure may be sufficient to fracture the injection zone thereby increasing the risk of migration of injected fluids into underground sources of drinking water. The reports are also reviewed for timely submission and completeness, and additional information on the reports is reviewed on an as needed basis. Before 1999, these reports were reviewed as necessary, for example, to supplement inspection reports or enforcement actions. Since DNR is not routinely reviewing all permit limits on the monitoring reports, there is an increased risk of noncompliance.

We also compared the annual monitoring report to the monthly monitoring report and found that four out of 10 wells (40%) reported an injection pressure exceedance on the monthly report but did not report it on the annual report. The exceedance should have been reported on the annual report since this report shows maximum and minimum injection pressures for the past year. In addition, we found some monthly reports with the same annulus pressure and injection pressure everyday for an entire month. Exhibit 8 on the following page contains an example of a monthly report that shows the same pressure readings for 30 consecutive days.

Exhibit 8
Example of DNR Monitoring Report With Identical Daily Values

DATE	ANNULUS PRESSURE (PSI)	INJECTION PRESSURE (PSI)	INJECTING AT TIME OF READING? YES NO	NAME OR INITIAL OF RECORDER	DATE	ANNULUS PRESSURE (PSI)	INJECTION PRESSURE (PSI)	INJECTING AT TIME OF READING? YES NO	NAME OR INITIAL OF RECORDER
1	300	800	/	DR	16	300	800	/	DR
2	300	800	/	DR	17	300	800	/	DR
3	300	800	/	DR	18	300	800	/	DR
4	300	800	/	DR	19	300	800	/	DR
5	300	800	/	DR	20	300	800	/	DR
6	300	800	/	DR	21	300	800	/	DR
7	300	800	/	DR	22	300	800	/	DR
8	300	800	/	DR	23	300	800	/	DR
9	300	800	/	DR	24	300	800	/	DR
10	300	800	/	DR	25	300	800	/	DR
11	300	800	/	DR	26	300	800	/	DR
12	300	800	/	DR	27	300	800	/	DR
13	300	800	/	DR	28	300	800	/	DR
14	300	800	/	DR	29	300	800	/	DR
					30	300	800	/	DR

Source: Prepared by legislative auditor's staff using DNR files.

According to DNR personnel, this is improbable. This is further evidence that operators may be filing false monitoring reports. Since DNR does not perform a record review during inspections of Class II commercial facilities, this in-house review becomes even more important to ensure that operators and wells are in compliance.

Recommendations

Recommendation II-16: DNR should begin reviewing the injection pressure in addition to the annulus pressure on the monthly reports.

DNR Response: DNR agrees with this recommendation and has implemented this review.

Recommendation II-17: DNR should include an attestation on all monitoring forms that informs operators of penalties for submitting false information. R.S. 30:17 allows penalties of not more than \$5,000 for false entries on reports.

DNR Response: DNR agrees with this recommendation and will consult legal counsel to determine the most appropriate wording to include on these reports.

Recommendation II-18: DNR should review a sample of operator's records during inspections and compare an annual report against operator's records to determine if an injection pressure greater than the maximum reported on the annual report was recorded.

DNR Response: DNR agrees with this recommendation and will implement actions to compare monthly Class II commercial well reports with the annual reports.

Most Current Maximum Authorized Surface Injection Pressure Difficult to Determine

Original permits contain maximum authorized surface injection pressure (MASIP) levels for each well. However, MASIP levels can be modified several times at the request of operators. During our file review, we found it extremely difficult to determine what the current MASIP was for each well. According to DNR, the current MASIP should be recorded in its computer database. However, we found no MASIP values in DNR's computer database for some wells in our sample and the MASIP was incorrect for one well.

Each injection permit specifies a MASIP level that cannot be exceeded when injecting. If operators exceed MASIP levels, the additional pressure may be sufficient to fracture the injection zone and possibly cause injected fluids to migrate into underground sources of drinking water. If the current MASIP is difficult to determine, inspectors and DNR staff reviewing monitoring reports may not be able to assess whether violations exist if they do not have the correct MASIP.

Recommendation

Recommendation II-19: DNR should ensure that the most current surface injection pressure is accurate in its database.

DNR Response: DNR agrees with this recommendation and is working within the framework of a new computer system to improve the availability of permitted surface injection pressures for wells.

DEPARTMENT OF AGRICULTURE AND FORESTRY

DAF Has Inadequate Tracking System for Inspections

Title 7, Section 161 of the Louisiana Administrative Code states that DAF may inspect all commercial pesticide applicator operations semiannually and that these inspections shall include inspection of the physical site and inspection of applicator records. However, DAF does not conduct a review of applicator records on every inspection. A DAF official said the department has an unwritten policy to review applicator records on inspections at least once a year.

During fieldwork, we reviewed 22 commercial applicator inspection files and found that only one inspection file included documentation of a records review. Because of the small number of inspections with records reviews in our sample, we wanted to review more inspections that included records reviews. However, DAF's database does not track inspections by type. Therefore, DAF staff told us they would have to manually count the number of inspections involving records reviews. Manually counting these inspections is an inefficient and outdated method. This manual system does not allow DAF to adequately track whether all required inspections were conducted. Because we were not aware of the annual records review inspection policy until after fieldwork, we were unable to test whether DAF met its annual inspection requirement dictated by its unwritten policy.

DAF's current database only tracks whether the inspection was routine or caused by a complaint. However, routine inspections may include a variety of types of inspections, including site inspections, equipment inspections, records reviews, and issuance of stop orders. Because DAF's current database does not include what specific type of inspection was conducted, there is no way to tell what occurred on these inspections.

Title 7, Section 167 of the Louisiana Administrative Code also requires that commercial applicators accurately maintain, for a period of two years, records of pesticide applications on a record keeping form or record keeping format approved by DAF. DAF said it approves the format of these records but does not approve the actual form. The inspectors told us that some applicators use scraps of paper to keep records. A standardized form would help ensure that all applicators keep records in a similar format and minimize the time and effort of inspectors doing records reviews.

Recommendations

Recommendation II-20: DAF should modify its electronic database to track inspections by type to ensure that its policy of conducting record review inspections annually is met.

DAF Response: DAF presently has a manual database and an electronic database. The electronic database is being upgraded.

Legislative Auditor's Additional Comments: DAF's electronic database as it existed during our fieldwork could not distinguish among types of inspections.

Recommendation II-21: DAF should develop formal written policies to replace its informal ones.

DAF Response: DAF agrees with this recommendation.

Recommendation II-22: DAF should develop a standardized form on which applicators can record pesticide application information.

DAF Response: DAF disagrees with this recommendation and states that it does have a standardized form.

Legislative Auditor's Additional Comments: DAF approves a standardized format not a standardized form. A standardized form would improve the efficiency of records inspections.

Section III: Does Louisiana apply enforcement actions effectively?

Enforcement programs within the Louisiana departments that are responsible for water quality are not as effective as they could be. As a result, enforcement actions may not ensure that violations are promptly and appropriately corrected. Therefore, continued noncompliance may result in harm to Louisiana waterbodies.

According to EPA standards and requirements for state programs, effective enforcement programs should contain a variety of key elements. Some of these elements include:

- Appropriate and timely identification of violations
- Enforcement actions should deter violators from future noncompliance or reduce violations
- Escalation of enforcement actions when violations recur
- Follow-up on enforcement actions to verify compliance
- Penalty assessment and collection

We reviewed various aspects of the enforcement process relating to water quality at each of the four state departments. We used one or more of the above factors to determine whether individual enforcement programs at these agencies were effective. Reasons for the effectiveness or ineffectiveness of these programs are summarized in Exhibit 9.

Exhibit 9
Summary of Effectiveness of Enforcement Programs

Department	Identified Appropriately?	Timely?	Deterrent?	Escalation?	Follow Up?	All Penalties Collected?
Environmental Quality	No, 55% of violations in sample for minor facilities had no action	No criteria-but 62% of majors and 81% of minors less than a year	No, 35% of minor and 46% of major facilities in our sample had future violations	Yes, 81% of the time	Not evaluated	No, has not collected \$441,188
Office of Public Health	No, 24% of violations in sample not identified	Not evaluated	Not evaluated	Not evaluated	No, only in one district	None assessed
Natural Resources	No, some violations in sample did not result in actions; others inconsistent	Not evaluated	Not evaluated	Not evaluated	Yes, 76% of the time	No, has not collected \$4,000
Agriculture and Forestry	Somewhat, some could have been stronger	No, all cases over a year	Not evaluated	No, some could have been stronger	None	No, has not collected \$6,250

Source: Prepared by legislative auditor’s staff using analysis performed during fieldwork.

Note: We selected the most relevant factors for each agency. Those columns with ‘not evaluated’ mean we did not evaluate those factors because of time constraints.

Overall, all of the departments need improvement in identifying violations and collecting penalties. As the exhibit illustrates, all departments were not always effective at appropriately identifying violations. For example, DEQ did not issue enforcement actions for over 55% of all violations in our sample and OPH failed to identify 24% of violations in our sample. Most departments did not conduct follow-up to determine if violators returned to compliance. In addition, three of the departments have not collected over \$440,000 in the penalties that were assessed in 1998 and 1999. The specific issues relating to each department's enforcement program are discussed in the following sections.

DEPARTMENT OF ENVIRONMENTAL QUALITY

No Evidence of Enforcement Actions for 373 Violations in Calendar Years 1998 and 1999

We reviewed 42 minor facility permit files and compared permit limits with what the facilities submitted on their discharge monitoring reports in 1998 and 1999. We found these permits showed 675 violations. Violations included not submitting discharge monitoring reports, effluent excursions on discharge monitoring reports, and not submitting noncompliance reports. However, we did not see any evidence that DEQ issued any enforcement action for 373 of those violations (55%) when it should have. See example of a discharge monitoring report with violations in Exhibit 10. DEQ issues enforcement actions based on its enforcement response guide and other subjective criteria.

Exhibit 10 Example of Discharge Monitoring Report With Violations

PERMITTEE NAME/ADDRESS: NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

NO DISCHARGE

PERMIT NUMBER: 001 DISCHARGE NUMBER: 001

MONITORING PERIOD
 FROM: 09/04/01 TO: 09/04/01

PARAMETER (22-32)	SAMPLE MEASUREMENT	(3 Card Only) (24-32)		Loading (24-41)	(4 Card Only) (24-45)		Concentration (24-51)		NO EX (24-52)	Frequency of analysis (24-53)	Sample Type (24-54)	
		Average	Maximum		Unit	Minimum	Average	Maximum				Unit
OXYGEN DEMAND, CHEM 00340 1 0 0	MEASUREMENT	*****	*****		*****	1,002.00	1,002			1	1:30	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****		*****	200	300	mg/L		1	1MONTH	GRAB
pH	MEASUREMENT	*****	*****	***	6.50	*****	6.60				1:30	GRAB
EFFLUENT GROSS VALUE SOLIDS, TOTAL	PERMIT REQUIREMENT	*****	*****	***	6	*****	9	5u		1	1MONTH	GRAB
SUSPENDED 00530 1 0 0	MEASUREMENT	*****	*****	***	*****	169	169			1	1:30	GRAB
EFFLUENT GROSS VALUE OIL AND GREASE	PERMIT REQUIREMENT	*****	*****	***	*****	30	45	mg/L		1	1MONTH	GRAB
FREON EXTR-GRAV METH 00556 1 0 0	MEASUREMENT	*****	*****	***	*****	*****	15.3			1	1:30	GRAB
EFFLUENT GROSS VALUE FLOW IN CONDUIT OR	PERMIT REQUIREMENT	*****	*****	***	*****	*****	15	mg/L		1	1MONTH	GRAB
THRU TREATMENT PLANT 00050 1 0 0	MEASUREMENT	*****			*****	*****	*****				1:30	EST.
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT	GPD	*****	*****	*****				1MONTH	EST.
	MEASUREMENT											
	PERMIT REQUIREMENT											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: *Debra Lee* TELEPHONE: 704 771 7170 DATE: 6/14/99

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: *Debra Lee*

AREA CODE NUMBER: 704 YEAR: 99 MO: 06 DAY: 14

COMMENT AND EXPLANATION OF ANY VIOLATIONS: (Reference all attachments here)

This facility exceeded its permitted limits for Chemical Oxygen Demand and for Total Suspended Solids. The highlighted areas show the sample measurement results compared to the permit requirements.
Source: DEQ files.

As stated previously, DEQ does not appear to be consistently reviewing monitoring data on minor facilities when these data are submitted. DEQ staff told us that they do review this monitoring data before conducting inspections. We saw evidence in our file review that DEQ reviewed these data when the facility already had other violations against them. For example, if DEQ inspected a facility and found a violation, DEQ staff may review the self-monitoring data to determine if the data showed violations. Then, DEQ staff could include those violations in addition to the original inspection violations. However, we did not see any evidence in our file review that these data were routinely reviewed. Therefore, DEQ may not know when violations occur. As a result, DEQ may be allowing minor facilities to operate with little regulation and oversight. DEQ's lack of enforcement action for these violations may result in continuing noncompliance that may jeopardize the quality of state waters.

DEQ Comment: DEQ states that it has taken enforcement actions on a number of the violations cited in this section.

Legislative Auditor's Additional Comment: When we conducted our file review, there was no evidence at that time of any enforcement action. DEQ did not provide any evidence that these violations were addressed by enforcement actions.

Inspection Discrepancies Did Not Result in Enforcement Action

DEQ performed 50 inspections on the 42 minor facilities and 26 inspections on the 16 major facilities in our sample for a total of 76 inspections in 1998 and 1999. We found that 42 of these inspections (55%) resulted in the inspector giving the facility an unsatisfactory rating in one or more areas. However, 29 of these 42 inspections (69%) did not result in at least a warning letter. EPA recommends that all areas found unsatisfactory on DEQ inspections be addressed with at least a warning letter. In addition, DEQ's Enforcement Management System document says that any violations of permit conditions found during inspections should receive at least a warning letter.

According to DEQ, all unsatisfactory inspections do not necessarily receive warning letters. Inspectors are supposed to write a summary of the inspection and give this to the facility. DEQ believes that this summary adequately addresses the unsatisfactory rating. However, this summary does not require the facility to address the violations in a formal response like a warning letter does. DEQ should develop a policy on inspections with unsatisfactory ratings. For example, DEQ could amend the inspection form to include a section where inspectors can mark violations and require the facility to respond.

Recommendation

Recommendation III-1: DEQ should develop a policy that requires facilities to formally respond to discrepancies found during inspections. It should also update the Enforcement Management System document to reflect this policy.

DEQ Response: DEQ stated that changes to the Enforcement Management System Document have been drafted and are being reviewed.

Some Enforcement Actions Did Not Deter Facilities From Committing Subsequent Violations

We found that DEQ's choice of enforcement action did not deter subsequent noncompliance in 35% of minor facilities in our sample and 46% of major facilities. We reviewed all facilities with enforcement actions in our sample to determine if the facility had an increased number of violations or similar violations after the enforcement action. Therefore, for the cases in our sample, DEQ's choice of enforcement action does not appear to be deterring noncompliant facilities from committing subsequent violations.

Obviously DEQ cannot force facilities to comply with enforcement actions. Some facilities may refuse to cooperate no matter what action DEQ takes. In addition, some of these cases were violations involving minor facilities. As stated previously, DEQ did not know about many of the violations involving these facilities because DEQ does not appear to review discharge monitoring reports. However, we believe that DEQ should at least track violations of known noncompliers more closely. For example, one facility was issued a compliance order in 1999 for four unauthorized discharges. The facility was also issued a compliance order in 1994 for not submitting four years of discharge monitoring reports. However, the facility has not submitted any reports in 1998 or 1999. DEQ has not taken any action on these violations because it does not know they exist. In addition, the original compliance order issued for not submitting discharge monitoring reports did not appear to be effective since the facility is currently not submitting the required reports. DEQ should have monitored this facility more closely because of the facility's history of compliance.

Recommendation

Recommendation III-2: DEQ should track facilities with poor compliance records more closely.

DEQ Response: DEQ stated that facilities with continuing or recurring violations are often the subject of multiple or escalated enforcement actions. These facilities generally receive more attention from both surveillance and enforcement staffs.

Some Enforcement Actions Issued Over a Year After Violation Occurred

We found that DEQ took over a year to issue enforcement actions for 19% of minor facilities in our sample and 38% of major facilities in our sample. DEQ's *Enforcement Response Guide* says that DEQ should determine the appropriate

response to violations within 30 days of the violation. Since we could not determine when DEQ determined an appropriate response, we calculated the length of time between the violation date and the enforcement action date. In addition, R.S. 30:2050.9 allows enforcement actions to be abandoned if the department does not take steps to obtain final enforcement action after two years. Therefore, lengthy enforcement cases may potentially benefit facilities who can have their orders abandoned after two years if DEQ has not followed up on formal enforcement actions. However, we did not see any evidence that this had ever occurred.

According to DEQ staff, many environmental cases are extremely complex and require an extensive amount of technical and legal reviews. However, untimely issuance of enforcement actions may result in facilities continuing to commit violations or a violation already being corrected before the order is issued. For example, DEQ inspected one facility in our sample and found several violations. Thirteen months later, DEQ issued a compliance order. The facility then requested an administrative hearing because some violations cited in the compliance order had been resolved before DEQ's issuance of the order. DEQ amended the order, but the facility requested another hearing because DEQ did not remove all violations. DEQ eventually issued the facility an 'all violations clear' letter. This example reveals that untimely enforcement actions can result in violations being corrected before issuance of the action. Untimely actions then result in wasted staff time and resources when violations are already corrected.

Recommendation

Recommendation III-3: DEQ should issue enforcement actions as close to when violations occur as possible.

DEQ Response: DEQ agrees with this recommendation.

DEQ Has Not Collected 47% of Penalties Assessed for Water Violations in 1998 and 1999

DEQ assessed 28 penalties totaling \$831,383 in calendar year 1998 and five penalties for \$114,764 in calendar year 1999. However, DEQ has not collected \$441,188 (47%) in penalties for those two years. DEQ assesses these penalties in accordance with its penalty matrix outlined in state regulations. This matrix requires DEQ to assign points to nine factors. These points are then used in a formula to calculate the penalty amount. This penalty matrix helps DEQ assess penalties fairly and consistently.

According to DEQ, the reason that some of these penalties are still uncollected is that in some cases, the penalty has been appealed and DEQ is still waiting on a decision. In other cases, DEQ settled for a lesser penalty or rescinded the penalty entirely. In cases where facilities refused to pay, DEQ has made the payment executory and/or filed a lien on those facilities. However, by not collecting all the penalties it has assessed, DEQ is not receiving all the money it is owed for environmental violations. It may also weaken the effect a penalty assessment has on deterring a facility from complying with its permit.

Most DEQ Enforcement Actions Were Appropriately Escalated

We found that DEQ escalated the enforcement actions appropriately in 81% of our sample cases. This means that DEQ is escalating most enforcement actions to a more severe action when facilities do not comply with their permits or have additional violations. According to a DEQ official, the department generally follows an order of formal actions. These actions include the following:

- Warning letter
- Notice of violation
- Administrative order
- Compliance order
- Notice of potential penalty
- Penalty
- Cease and desist order

To determine if enforcement actions were appropriately escalated, we considered the number of violations, the severity of the violations, and whether similar violations kept recurring.

DEQ's Beneficial Environmental Projects Need Criteria

Beneficial environmental projects allow companies that have committed environmental violations to opt to perform environmental projects in lieu of or in addition to paying penalties. DEQ has been settling with companies to perform these projects since 1988. In April 2000, DEQ promulgated a rule specifying the categories of projects that may be approved. Since 1988, but before the rule, DEQ has approved at least five projects resulting from water quality violations. These projects and their costs are summarized in Exhibit 11.

Exhibit 11
Beneficial Environmental Projects Resulting From Water Violations

Facility	Original Penalty	Penalty Paid	BEP Amount
No Fault Industries	\$10,448	\$0	\$8,000
Conagra Broiler	105,000	0	60,000
Gaylord Container	50,000	17,500	275,000
Dow Chemical	120,740	0	75,000
Fina Oil & Chemical	48,607	12,000	21,500
TOTALS	\$334,795	\$29,500	\$439,500

Source: Prepared by legislative auditor's staff using DEQ data.

According to a DEQ official, companies are not getting a 'better deal' by agreeing to the projects, since they will cost more to implement than paying a penalty. However as shown in Exhibit 11, only one company (Gaylord Container) ended up paying more for the project than the original penalty assessed. The company was issued a penalty for \$50,000 but agreed to pay \$17,500 of the penalty and spend an additional \$275,000 on a project involving modifications to that company's own facility. The other four companies were originally issued penalties totaling \$284,795. However, they only "paid" a total of \$176,500 (38% less) in penalties and projects combined. These numbers suggest that companies may be getting a better deal by choosing to do the projects instead of paying a penalty. Not only are companies paying less, but DEQ foregoes revenue by allowing these projects.

In addition, only two of the companies shown above were required to submit evidence to DEQ of actual costs incurred by the project. Without this evidence, DEQ cannot determine whether the costs of the project equaled or exceeded what was agreed upon in the settlement. In addition, DEQ does not require the company to submit notification of satisfactory project completion. In all cases, DEQ relied on the facilities' verbal or written response instead of physically inspecting the project.

Another area of concern is how DEQ will choose the environmental projects. DEQ can approve a project if it falls under one of the broad categories outlined in its rules. However, one of the categories is "Other," which may lead to projects serving special or political interests. According to a DEQ official, the types of projects can be recommended by "just about anyone."

Recommendation

Recommendation III-4: DEQ should develop additional requirements for beneficial environmental projects, including requiring that facilities submit actual costs of the project and ensuring that the project costs at least as much as the original penalty amount. In addition, DEQ should inspect the projects once they are complete to verify satisfactory completion or have project beneficiaries submit a letter certifying that projects are completed and satisfactory.

DEQ Response: DEQ does not agree with the recommendation that it needs additional requirements for beneficial environmental projects. However, DEQ does agree that the department could incorporate a more formal process for tracking or documenting final completion of the project requirements.

DEQ Often Voids or Amends Enforcement Actions; Some Due to Its Untimely Actions

Using electronic data from DEQ on enforcement actions, we found that DEQ had to void 143 actions out of 580 (about 25%) in 1998 and 1999. According to DEQ staff, DEQ may have to void an action when it determines that no action is warranted because of insufficient evidence or lack of jurisdiction. In addition, we found that the following compliance orders in our sample had to be amended because of DEQ errors:

- DEQ issued a compliance order to Allied Signal in 1999 for several violations including discharging stormwater without authorization through a permit. However, the facility had actually submitted the permit application in 1992, but EPA had not issued it. Because of the untimely issuance of permits, DEQ had to amend this compliance order. Another facility, Vintage Petroleum, had a similar experience.
- DEQ and a contractor for EPA inspected Crown Vantage Paper in 1997 as part of a multimedia inspection and found four violations. In 1999, DEQ sent the facility a compliance order for these violations. The facility requested a hearing because all of the violations had already been corrected and because of the inadequacies of the inspection report. The case ultimately ended with DEQ issuing an “all-violations-clear” letter to the facility.

As shown in the cases above, DEQ’s untimely enforcement and untimely issuance of permits can also result in DEQ amending or rescinding enforcement orders. This is costly because DEQ may spend time and effort pursuing corrective actions when violations have already been corrected.

OFFICE OF PUBLIC HEALTH

OPH Staff Did Not Identify All Maximum Contaminant Level Violations in Our Sample

We found that 24% of total coliform maximum contaminant level (MCL) violations identified from routine samples in our sample were not identified as violations by OPH district staff. In addition, two water systems in our sample would have met the escalation policy and received a formal enforcement action if all of their MCL violations had been entered into the computer database. One reason may be that OPH staff are not carefully analyzing sample results.

According to the federal Primary Drinking Water Regulations, a total coliform MCL violation exists when a system collecting less than 40 routine samples a month has two or more routine or repeat samples test positive for total coliform. A total coliform MCL violation exists for systems that collect 40 or more routine samples when 5% or more of their routine or repeat samples test positive for total coliform.

When an MCL violation occurs, the District Office sends a notice of violation letter to the public water system. This letter tells the water system that it has an MCL violation and instructs the system to issue public notification to its users according to the federal Primary Drinking Water Regulations. (See Appendix I for a sample letter.) The water system must then send proof of the public notification to OPH when it issues the notification.

The Central Office and the EPA Region 6 Office review violations in the database on a quarterly basis to determine which water systems to target for formal enforcement action according to the escalation policy. Because 24% of violations in our sample were not identified, they were never entered into the computer database for consideration against the escalation policy, the water systems were never told to issue public notification, and the public was never informed about the violations.

Recommendation

Recommendation III-5: OPH regional engineering staff should review sample analysis results carefully to determine if an MCL violation has occurred and to ensure that all violations receive an enforcement action.

OPH/DHH Response: OPH will implement a system of random auditing of Regional files for compliance with MCL violation identification.

Water Systems Frequently Did Not Send Verification of Public Notification to OPH; OPH Does Not Issue Enforcement Actions for the Failure to Issue Public Notification

We found that 53% of the MCL violations that were identified by OPH in our sample did not result in the public water systems sending verification of the public notification to OPH. Without this verification, there is no proof that the system notified the public of the violation.

The state Sanitary Code requires public water supplies to comply with sections of the federal Primary Drinking Water Regulations. The federal Primary Drinking Water Guidelines require public water systems to notify the public when they have an MCL violation. The public water systems must then send proof of the public notification to OPH. The failure to issue public notification is a violation of both the state and federal regulations for which there are enforcement actions OPH can take. The state Sanitary Code contains a classification system that divides violations into these types: imminent threat, priority threat, and non-imminent threat. The failure to issue public notification for total coliform MCL violations falls into the priority threat classification. However, in practice, OPH does not issue enforcement actions to systems for the failure to issue public notification unless it is part of a larger administrative order.

Although the district offices send a letter to the public water systems instructing them to issue the public notification, only the Shreveport District uses a formal method to track whether or not the public water systems sends proof of the public notification back to the District office. Under current practices, penalties are not issued for the failure to issue public notification even though state regulations allow for enforcement actions and penalties to be issued. According to OPH staff, the only way that a public water system would be cited for failure to issue public notification is if it received an administrative order for another violation and the failure was noted during a file review.

As a result, these public water systems are in violation of the federal regulations and the public is not made aware of a potential problem with their drinking water. Also, because OPH does not issue enforcement actions for the failure to issue public notification, there is little incentive for water systems to comply with this requirement.

Recommendation

Recommendation III-6: OPH should take enforcement action against water systems that fail to issue public notification.

DHH/OPH Response: OPH did not directly address this recommendation. However, it will issue a policy for the regions to keep verification records that public notices were issued by water systems. OPH will also implement a uniform documentation procedure within the *Standard Operating Procedures Manual*.

Most Districts Do Not Conduct Formal Follow-up for Sanitary Survey Violations

In our file review, we saw formal follow-up of sanitary survey violations in only one district, the Shreveport District. The files in the other three districts did not contain any documentation of follow-up. Staff in the other districts stated that they do conduct informal follow-up of systems that they know might have problems coming into compliance; however, this follow-up is not documented.

We were only able to examine the follow-up for sanitary survey violations for 53% of the systems in our sample. We only looked at systems that had had more than one survey conducted in the past five years for surface water systems and in the past ten years for groundwater systems. Of the systems that had had more than one survey conducted, 37.5% had the same violation repeated on multiple sanitary surveys.

According to the federal Primary Drinking Water Regulations, states that have primacy must have the authority to require water systems to respond in writing to significant deficiencies noted in sanitary surveys and describe how and when the system will correct those deficiencies. The regulations also require that states with primacy have the authority to assure that water systems address the significant deficiencies. Based on these regulations, we feel that it is important for OPH to conduct follow-up to ensure that the water systems have corrected the deficiencies noted in the sanitary survey.

Sanitary surveys enable the state to determine if the public water system is able to produce potable drinking water. Once the sanitary survey is conducted, a letter is sent to the facility identifying any violations of the state Sanitary Code or the Safe Drinking Water Act. The systems are told to correct the violations in order to come back into compliance and are often provided with recommendations for doing so.

OPH personnel stated that a district can refer the violations to the Central Office for issuance of an administrative order. However, this is completely up to the district and we did not see any administrative orders issued as a direct result of sanitary surveys. We did see administrative orders issued for other violations with violations from the sanitary survey added to the order.

OPH officials stated that the reason for the discrepancies among districts and the level of follow-up conducted is a lack of staff. We examined staffing levels from district to district and found they are comparable from district to district (see Appendix J). However, staffing levels may be affected by vacancies or the position responsibilities that may differ from district to district depending on the regional administrator.

Without follow-up to the surveys or enforcement action, systems have no incentive to correct the violations noted on the sanitary survey. Therefore, it is possible for the same violation to continually appear in subsequent sanitary surveys as we saw in our sample. If the violations are not corrected, they could jeopardize the quality of the drinking water that the water system provides to its users.

Recommendations

Recommendation III-7: OPH should begin issuing enforcement actions for failure to correct significant deficiencies identified by sanitary surveys.

DHH/OPH Response: OPH responded that the reduced sanitary survey schedule will free personnel to perform more follow-up and documentation of corrections to significant deficiencies.

Recommendation III-8: OPH should implement a policy that requires follow-up when sanitary surveys show significant deficiencies.

DHH/OPH Response: OPH responded that the reduced sanitary survey schedule will free personnel to perform more follow-up and documentation of corrections to significant deficiencies.

Enforcement and Violation Data in OPH's Computer Database Were Often Inaccurate

We found that the Safe Drinking Water Program's computer database was often inaccurate for enforcement and violation data. We checked to see if entries into the database had been made for the issuance of all administrative orders in 1998 and 1999. We also tested to determine if receipt of proof of public notification had been entered correctly for violations in our sample.

- In 1998, 16 of the 20 (80%) administrative orders issued were not entered into the computer.
- In 1999, 23 of the 36 (64%) administrative orders issued were not entered into the computer.
- The Lafayette District was the only district with a 100% accuracy rate when we checked the public notification codes in the computer against documentation in the file. The other districts averaged a 65% accuracy rate.

The Enforcement Unit at the Central Office notifies the regional offices when an administrative order is issued and must ask the regional staff to enter the enforcement codes into the database. The district offices are required to enter an enforcement code into the database when a system sends proof that public notification has been issued for an MCL or a monitoring violation.

One of the reasons for the inaccuracy of the administrative order data is that the Enforcement Unit at the Central Office does not have the capability of entering enforcement actions into the database. The inaccuracy of public notification enforcement codes could be attributed to the fact that under current OPH practices the failure to issue public notification does not require further action. Under current OPH policy, the district offices' responsibility ends with the issuance of the letter telling the water system that it had an MCL violation and it must issue public notification.

As a result, the database does not accurately reflect enforcement actions taken for violations.

Recommendation

Recommendation III-9: The Enforcement Unit should be given access to the database by the Central Office in order to enter enforcement codes for actions it initiates.

DHH/OPH Response: OPH agrees with this recommendation and with the implementation of the new database, the Enforcement Unit will have access to the database.

DEPARTMENT OF NATURAL RESOURCES

DNR Does Not Have Formal Written Criteria for Enforcement Actions

DNR does not have formal written criteria on what enforcement actions to take for certain violations. As a result, the enforcement actions taken may not be consistent. According to a DNR official, each violation is different and enforcement actions are determined on a case by case basis. In addition, the severity of the enforcement action depends on several subjective factors, including the past compliance history of the operator, the economic benefit of noncompliance, whether the violation was intentional and whether the violation was reported by the operator or discovered by a DNR enforcement agent. Formal written criteria for enforcement actions may help DNR issue these actions more consistently and appropriately.

For example, DNR does not issue enforcement actions consistently for injection pressure violations discovered during its inspections. We randomly selected files for 25 wells from a population of injection wells with similar violations in 1999. The majority of the violations involved operators injecting above their MASIP (18 wells with 30 MASIP violations). DNR discovers these types of violations by either reviewing annual reports or physically inspecting these wells. In our sample, DNR discovered 10 of the MASIP violations from reviewing annual reports and 20 of the MASIP violations from observations on inspections. DNR does have informal criteria for the severity of the enforcement action when DNR discovers violations on the annual report. Therefore, we found that DNR issued enforcement actions consistently for those violations discovered in this review. However, DNR took several different levels of action addressing similar MASIP violations discovered on inspections. In these cases, DNR took the following actions:

- Six (30%) did not have any enforcement action.
- Five (25%) were issued notices of violations (one notice included two violations).
- Two (10%) were issued compliance orders (orders the operator to comply within a certain timeframe).
- Two (10%) were issued compliance orders with penalties.
- Two (10%) were issued compliance notices (a notice to the operator to comply).
- Three (15%) resulted in the inspector sealing the well with no further action documented in the file.

Since DNR does not have criteria for what enforcement action to take, it was difficult to determine if these actions were consistent with that criteria. Although DNR staff told us that each violation is different, DNR staff do not document why they chose certain enforcement actions over others or how, if any, penalties are calculated. In the absence of solid criteria, DNR should at least keep evidence of how it selected actions and penalties. This would help justify actions and provide supporting evidence if DNR's enforcement actions are ever challenged by facilities.

Recommendations

Recommendation III-10: DNR should develop formal, written criteria for enforcement actions or a penalty matrix similar to other regulatory agencies.

DNR Response: DNR will consider the development of formal, written criteria and a penalty matrix for enforcement actions.

Recommendation III-11: DNR should maintain documentation that shows how it determines what enforcement action to take.

DNR Response: DNR agrees with this recommendation and will consider procedures to document how enforcement actions are determined.

Annular Disposal Permits Pose Greater Risk to Groundwater

DNR and state regulations currently allow the annular disposal of fluids into production wells. This type of well is used for both production and disposal. The waste (either saltwater or drilling mud) is disposed into the annulus (the casing) of the well rather than being injected down the well through the injection tubing. Permits for the disposal of drilling mud are issued for a one time use, while permits for the saltwater disposal are issued for one year. DNR issues between 350 and 400 permits each year for drilling mud disposal. DNR does not routinely report these types of wells to EPA unless the well has a violation. However, EPA is currently undecided about whether these types of wells are within the scope of the Underground Injection Control program and the Safe Drinking Water Act.

According to staff from EPA Region 6, this activity has a high potential to contaminate underground sources of drinking water because of the high pressure necessary to force the drilling mud into subsurface formations. This pressure may fracture the formation and result in leakage to water sources. In an injection well, the annulus is used as a protective barrier for the underground source of drinking water. However, in these types of wells, the annulus is used for the actual

injection and therefore there is no additional layer of casing protection. According to DNR, these activities are a cheaper alternative than disposing of this waste in an offsite commercial facility.

As of December 2000, there were approximately 36 wells with permits for annular disposal of saltwater. In our file review, we found three violations involving these types of wells. All of these violations resulted from the operator injecting without having a current permit. However, DNR issued three different levels of enforcement actions as follows:

- One well was issued a compliance order and a \$9,500 penalty.
- One well was issued a compliance order and a \$5,000 penalty.
- One well was only issued a notice of violation.

DNR staff did not provide any evidence supporting why they chose these enforcement actions in these cases. As a result, DNR appeared to have issued enforcement actions inconsistently for these cases. Without regulations or enforcement policies outlining what violations merit which enforcement actions or a penalty matrix, DNR cannot support its choice of action or penalty amount.

Several Violations Did Not Result in Enforcement Action

In our violation file review, 18 wells had 19 additional violations (other than those mentioned above) involving MASIP exceedances since 1994. Eight of these violations had MASIP exceedances above the fracture pressure. However, none of these violations resulted in an enforcement action. In these cases, DNR did not review the annual reports and did not know these violations existed.

We also analyzed electronic records of DNR violations from calendar year 1999 to determine if violations existed without enforcement actions. We found that 35 out of 618 (5%) violations did not result in an enforcement action. When we reviewed the physical files, we could not find two files and we found that only 20 of the 33 files had evidence of an enforcement action in the file but not in the database. However, 13 (2%) did not have evidence of an enforcement action in either source.

Federal and state laws allow DNR to issue enforcement actions such as penalties and civil actions. However, DNR does not have specific criteria such as a penalty matrix or enforcement guide that lists what types of enforcement actions should be issued for certain violations.

If DNR does not issue enforcement actions for violations, operators could assume that DNR is not serious about its enforcement responsibilities. Without a penalty matrix or other criteria, we could not quantify the amount of money lost.

Legislative Auditor's Additional Comments: DNR found enforcement actions for some violations we said did not have actions. DNR supplied us with copies of these documents after the audit was complete. However, we did not have time to audit these documents before the report was completed. We did verify that the four wells with eight MASIP exceedances did not have enforcement actions as we originally reported. However, we were unable to verify the other enforcement actions described in DNR's response.

Poor Internal Controls Over Penalty Collection

The same section at DNR that assesses penalties also collects the penalty because the Accounting Section has delegated this responsibility to them.

After assessing penalties, DNR enforcement staff also receive the actual check and then send the check to the department's accounting section. On one occasion, DNR misplaced two checks. Because of this, two checks totaling \$3,500 written in October 1999 were not deposited until July 2000. Having DNR enforcement staff receive penalties that they assess for violations increases the risk of misplaced checks, fraud, and untimely deposits. This practice also reflects poor internal controls. According to a U.S. General Accounting Office (GAO) report on internal control standards, key duties need to be divided among different people to reduce the risk of error or fraud. GAO also stresses the necessity of promptly recording transactions and maintaining documentation of transactions.

R.S. 30:18 provides for penalties of not more than \$5,000 per day for each violation of regulations in Title 30 of the Louisiana statutes. In calendar year 1999, DNR assessed 30 penalties totaling \$85,000. However, it still has not collected \$4,000 (or about 5%) of these penalties. According to DNR, two of the uncollected penalties (totaling \$2,000) will probably not be collected because the companies are no longer viable. DNR is still waiting to collect the other two penalties (totaling \$2,000)

Recommendation

Recommendation III-12: DNR should establish procedures to have checks sent directly to its Accounting Section. The Accounting Section can then notify the Enforcement Section when funds have been received.

DNR Response: DNR agrees with this recommendation and is working within the framework of the policies and procedures on the DNR Accounting Section.

DNR Conducted Follow-up to Ensure That Violators Returned to Compliance

In our review of 25 files, we found that DNR did conduct follow-up in 19 violations (76%). In 12 of the 19 cases, DNR conducted subsequent inspections. In five of the 12 subsequent inspections, the operator/well was still out of compliance. In the other seven cases, DNR accepted letters from operators that outlined how achieving compliance was planned. However, for the other six cases (24%), there was no evidence that DNR conducted an inspection or received a letter from the violator. Therefore, DNR has no assurance that these violations have been corrected.

There is no requirement that DNR follow-up on violators to ensure that violators have returned to compliance. However, to ensure that Louisiana's underground water resources are protected, it is imperative that DNR ensures that violators return to and maintain compliance.

DEPARTMENT OF AGRICULTURE AND FORESTRY

Some Enforcement Actions Could Have Been Escalated

DAF's enforcement actions relating to regulating pesticide application could be more stringent. We randomly selected and reviewed 25 violation cases for calendar year 1999. Eight of these cases resulted in hearings before the Advisory Commission of Pesticides and 17 resulted in warning letters from the department. All of these violations were due to complaints.

We found that most complaints against pesticide applicators that resulted in the eight hearings were assessed penalties in accordance with DAF's penalty matrix. However, we found two cases where the applicator had previous violations of an identical nature and had received warning letters for those violations. DAF's penalty matrix requires that the department consider whether the violation is minor, moderate, or major when determining an appropriate penalty. This enforcement response policy outlines factors that would indicate a moderate or major violation. One of these factors is individuals who received prior warning letters. Therefore, it appears that DAF should be considering prior warning letters when determining the severity of the penalty amount.

However, these two prior warning letters mentioned above were not considered when DAF determined the penalty amount. According to DAF, they were not considered because violations resulting in warning letters are not considered to be offenses and thus are not considered in determining penalties. However, warning letters clearly state that an alleged violation of state law has occurred and therefore DAF should consider these prior violations when determining an appropriate penalty amount.

For example, DAF issued a \$500 penalty in 1999 (resulting from a complaint) to one applicator that applied a pesticide which drifted off the targeted area and caused slight to heavy damage to a nearby yard. This applicator also had two identical complaints in 1997. DAF issued warning letters for these 1997 complaints. However, because of these previous two warning letters, DAF could have issued higher penalty.

In addition, we found that most of the 17 complaint cases resulting in warning letters were issued these letters appropriately. We compared the types of violations resulting in warning letters to the types of violations resulting in hearings and penalties to determine if any of the violations receiving warning letters were similar to those receiving hearings. We found three cases that could have resulted in a hearing and penalty. These three cases involved multiple offenses of the same violation. However, DAF sent a warning letter each time this applicator had another violation. Therefore, in these cases, DAF did not appropriately escalate the enforcement action, which may have deterred the applicator from subsequent noncompliance.

One reason that DAF does not always issue enforcement actions appropriately could be the absence of a database that tracks historical complaint data. With DAF's current database, it is very difficult to determine how many complaints each applicator has had over previous years. Consequently, DAF and the Advisory Commission on Pesticides are not considering past compliance when selecting enforcement actions and are not escalating actions appropriately. Therefore, DAF is not ensuring that all violations are handled consistently and in accordance with its policies and procedures.

Recommendation

Recommendation III-13: DAF should consider prior warning letters when determining the severity of the enforcement action and penalty in accordance with its enforcement response policy.

DAF Response: DAF does not agree with this recommendation. DAF does not consider a warning letter an offense.

Legislative Auditor's Additional Comments: DAF's Enforcement Response Policy approved by EPA allows DAF to consider previous warning letters when determining the severity of the penalty. The penalty matrix requires that DAF determine if the current violation is minor, moderate, or major. The Enforcement Response Policy states that factors that may be considered when determining whether a violation is moderate or major include prior warning letters. However, the department has not formally promulgated this policy according to the Administrative Procedures Act.

Hearing Cases Not Resolved Timely and Penalties Not Always Collected

None of the violations that resulted in hearings in 1999 were resolved timely. In all eight cases, the commissioner did not sign the stipulation until over a year later after the Advisory Commission on Pesticides assessed a penalty. In these cases, DAF assessed penalties totaling \$9,750. However, DAF has not collected \$6,250 in penalties as of October 2000 (64%). In one case, the commissioner rescinded a \$5,000 penalty and instead suspended the applicator's license. In another case, the applicator died before paying and, in still another case, the applicator has simply not paid.

The Advisory Commission on Pesticides meets at least twice a year to hold hearings. DAF enforcement staff make recommendations to the commission for penalties based on the penalty matrix. Following DAF's recommendations for enforcement actions, the commission and commissioner of agriculture must approve the action.

According to Pesticide Enforcement staff, these eight cases were untimely because the person who handled enforcement actions was assigned to other duties at that time. Although the penalties that DAF has not collected is a small amount, the department has uncollected revenue. Also, DAF's failure to collect penalties timely may not deter similar violations in the future.

DAF's Comments From Its Response: According to DAF, not always collecting penalties is a necessary and expected fact of all enforcement programs, both civil and criminal. Additional comments can be found in Appendix K-4.

Enforcement Data Not Complete or Accurate

In calendar year 1999, DAF reported to EPA that 103 warning letters were issued. However, when we obtained DAF's electronic data on these warning letters, the totals did not match. According to DAF, it does not rely on the electronic data to track or compile totals on enforcement actions. Instead, department staff manually count the number of warning letters each time they have to report to

EPA. However, when we obtained copies of all warning letters sent to EPA in FY1999, the physical count of letters did not match the 103 letters that DAF reported. We counted 71 warning letters instead of the 103 that DAF reported to EPA.

In 1979 under US Code Title 7 - Agriculture, Section 136w-1, DAF was delegated primacy for the administration of enforcement responsibility for pesticide use violations. As a condition of this enforcement responsibility, DAF must report the number of its enforcement actions to EPA each quarter.

Because DAF does not have a database to accurately track complaints, DAF is not reporting accurate data to EPA on the number of warning letters sent and is not retaining evidence of how it generates counts of enforcement actions. Consequently, DAF reported more enforcement actions to EPA in calendar year 1999 than it actually issued.

Recommendation

Recommendation III-14: DAF should ensure that its database includes historical data on pesticide applicators. DAF should also develop an integrated system that includes data on complaints, violations, inspections, certificates, and other compliance information. This would allow DAF to keep more accurate totals for EPA reporting instead of manually tracking this information.

DAF Response: DAF partially agrees with this recommendation. DAF has an electronic database that will eventually include all data that are relevant to enforcement and reporting functions.

Section IV: Are Louisiana's water quality programs fragmented?

During our audit, it came to our attention that Louisiana's programs that regulate the state's water are spread over many departments. Unlike other states, Louisiana programs that are designed to protect water quality are housed in five different state departments. Because these programs are in separate departments, some water quality functions within these departments may not formally coordinate related water quality responsibilities. This lack of formal coordination and communication may result in fragmentation. For instance, both OPH and DEQ have laboratory accreditation programs. Both of these programs are in the process of becoming accredited by the same national accrediting entity and both accredit laboratories for environmental purposes. Because both departments may accredit the same laboratories, these two programs could be combined under one administrative entity to reduce costs to the state.

In addition, the approval process to construct and maintain a sewage treatment plant is divided among two departments. This fragmentation, accompanied with the lack of formal communication between the two agencies, results in an inefficient process.

Water Quality Programs Are Spread Across State Departments

Our audit on water quality led us to look at five programs designed to protect water quality. Each one of these programs is located in a separate state department as shown in the chart below.

Program	Department
National Pollutant Discharge Elimination System (NPDES)	Department of Environmental Quality
Safe Drinking Water Program	Office of Public Health, Department of Health and Hospitals
Underground Injection Control	Department of Natural Resources
Pesticide Regulation	Department of Agriculture and Forestry
Water Well Driller and Registration Program	Department of Transportation and Development

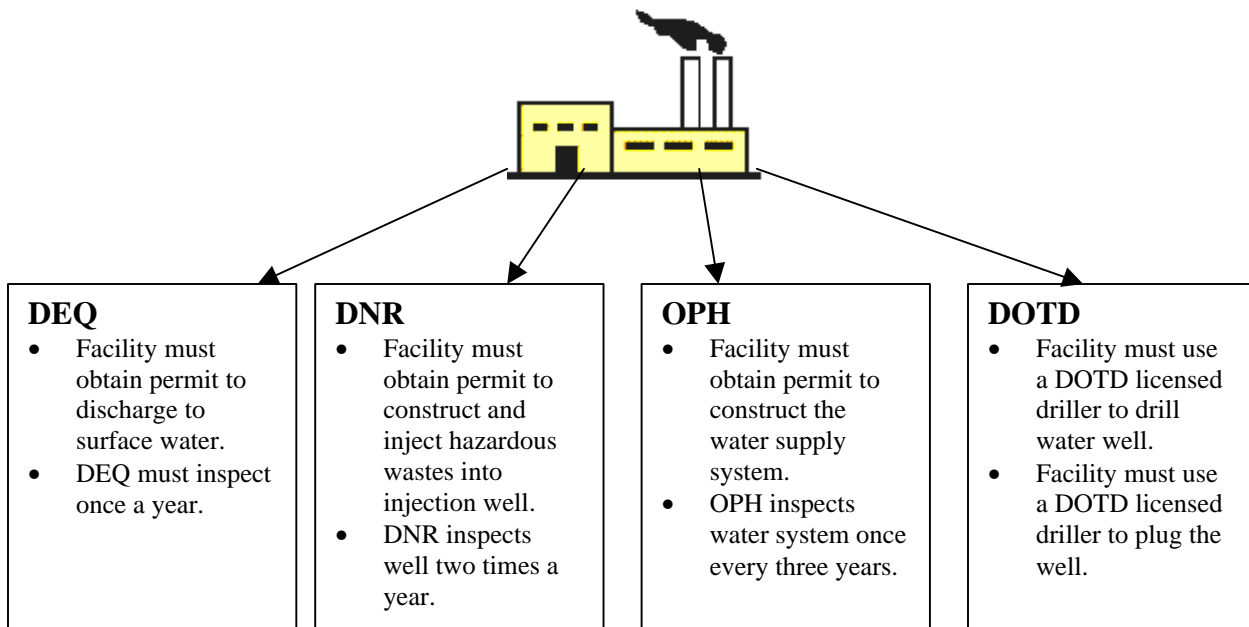
We conducted a cursory review of these five programs in the other 49 states to determine their placement within the state's governmental structure. For example, we found that at least 80% of states house the pesticide regulation program within the Department of Agriculture or its equivalent. However, we found the other four programs were most frequently located in only one or two departments as opposed to four departments in Louisiana.

We found the following:

- Sixty-four percent of states house the NPDES and Safe Drinking Water Programs in the same department. (Louisiana uses two departments.)
- Forty-six percent of the states house the NPDES, Safe Drinking Water, and the UIC programs in the same department. (Louisiana uses three departments.)
- Thirty-six percent of the states house all four programs in the same department.

In Louisiana, all four programs are housed in four different state departments. The following case scenario illustrates how one facility could interact with these four departments. In the case illustrated below, this major facility discharges produced wastes into surface water and hazardous wastes into underground injection wells. This facility also has its own public water supply system that obtains water from groundwater.

Exhibit 12
Example of Water Quality Program Activities for One Facility



Source: Prepared by legislative auditor's staff using information from the departments.

This exhibit shows that one facility may be subject to regulation from four different state departments. This fragmentation across different state departments may result in inefficient and confusing service to the public.

Laboratory Accreditation Programs May Be Duplicative

DEQ and OPH both have laboratory accreditation programs that accredit or certify laboratories that submit monitoring data to the departments for analysis. Laboratory accreditation/certification is a means of ensuring that data submitted from laboratories to state regulatory agencies for compliance with permits and/or maximum contaminant levels is accurate and reliable. The accreditation and certification process involves inspection of laboratory standards, processes and records. In FY2000, DEQ received \$250,000 for its program and has a staff of six. OPH received over \$61,000 for its program and has a staff of four. However, two of the OPH staff also oversee other laboratory programs.

Both the OPH and DEQ laboratory accreditation programs are in some stage of becoming accredited by the same national accrediting entity called National Environmental Laboratory Accreditation Program (NELAP). NELAP accredits state agencies that accredit environmental laboratories. Under NELAP, states will have more standardized accreditation procedures that will result in reciprocal agreements among states. Also, under NELAP, DEQ's and OPH's accreditation procedures would be almost identical since both will conduct inspections every two years and require that the laboratories analyze performance evaluation samples twice a year.

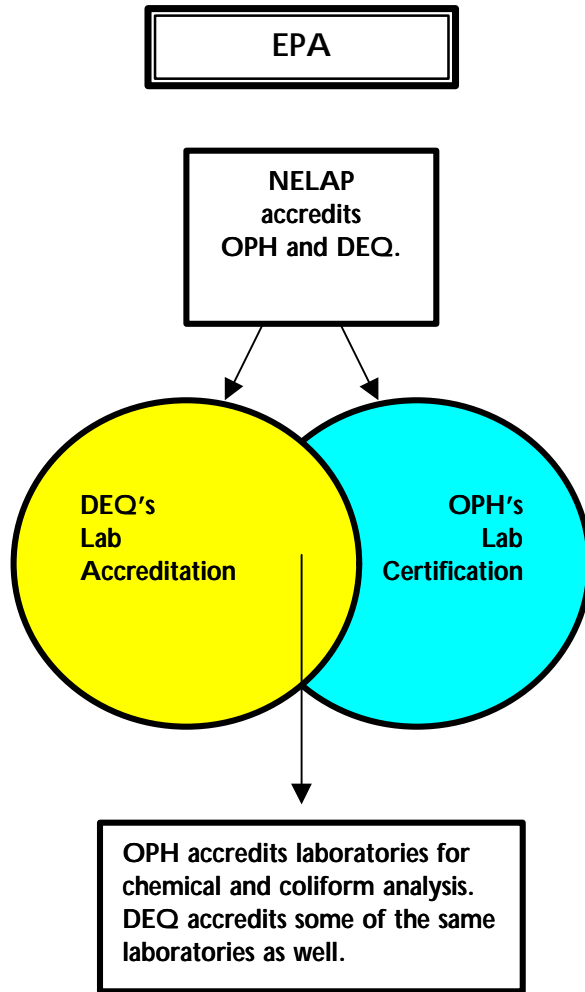
Neither NELAP or EPA requires two separate laboratory accreditation programs. It is up to the states how they want to structure these programs. Staff at both agencies have told us that the two programs are different because they are governed by separate laws. OPH's program for laboratory certification is governed by the Safe Drinking Water Act and DEQ's program for accreditation of water laboratories is governed by the federal Clean Water Act. According to the departments' staffs, both of these laws require different laboratory methods. For example, laboratories must detect lower levels of substances for OPH and higher for DEQ. However, at one plant we visited with DEQ inspectors, the plant manager stated that its DEQ permit parameters were actually lower (more stringent) than its drinking water parameters. In addition, according to the director of NELAP, nothing in the federal laws prevents one program from overseeing both types of accreditation. In Oregon, for example, there were at one time three different laboratory accreditation entities. However, Oregon has recently combined all three under one administrative body.

We believe that having one program would increase efficiency not only for the state but also for the laboratories, EPA, and NELAP. Having one accreditation program could reduce overhead and administrative costs to the state. In addition,

laboratories would only have to go through one agency for both accreditations, NELAP would only have to accredit one body, and EPA would only have to review one program. The director of NELAP also agreed that it would be more efficient for them to accredit one entity rather than two. An example of how these entities overlap is found on the following page. Exhibit 13 shows how both DEQ and OPH accredit some of the same commercial laboratories. For example, we found that eight laboratories were accredited by both DEQ and OPH.

OPH Comments: OPH agrees that one laboratory accreditation program in Louisiana is sufficient both functionally and financially.

Exhibit 13
Illustration of Overlap With Laboratory Accreditation



Source: Prepared by legislative auditor's staff using information from DEQ and OPH.

Sewage Treatment Approval Process Inefficient

Both OPH and DEQ have roles in approving sewage treatment plant activities.

OPH is responsible for approving the plans for constructing sewage treatment plants. OPH engineers must approve the plans for a new plant (or any modifications to an existing plant) before construction can begin.

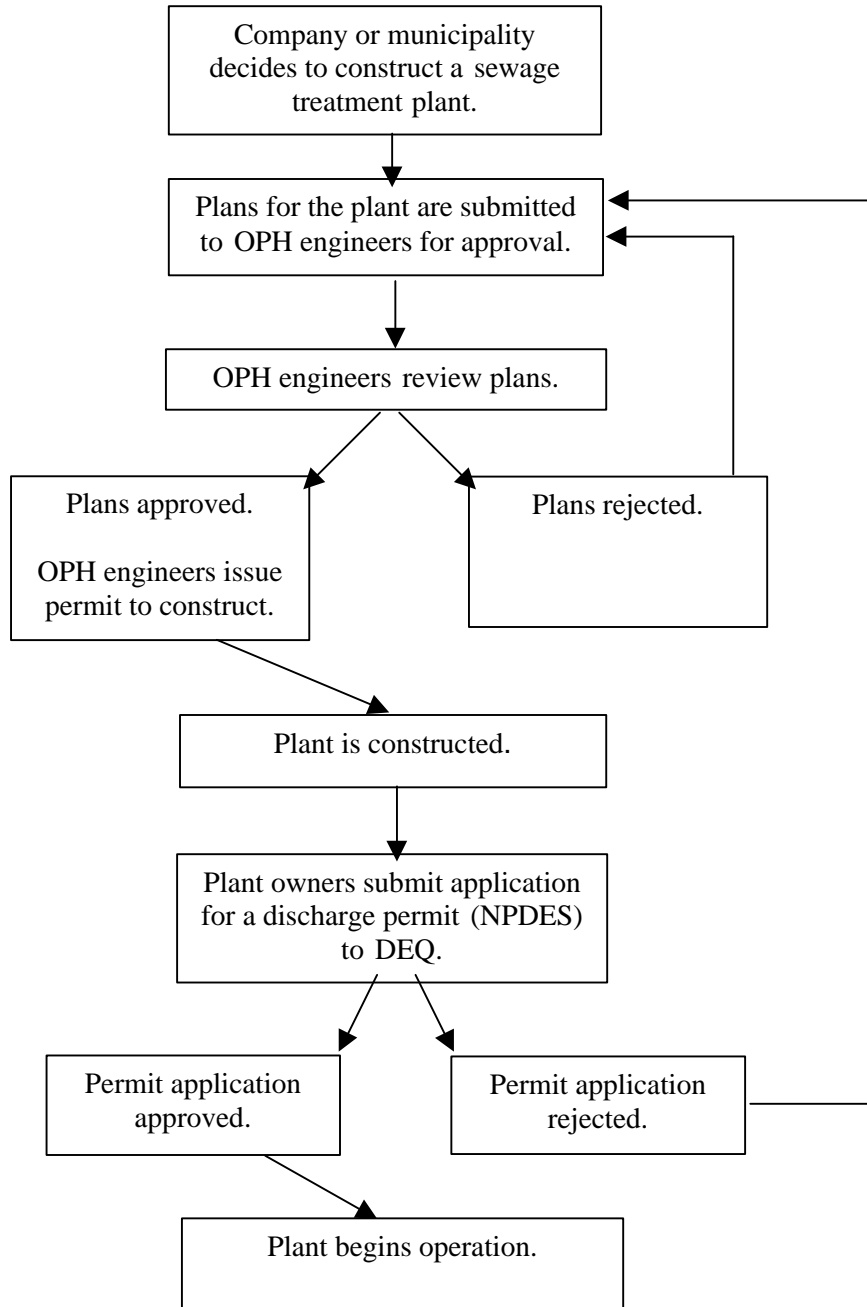
However, before the plant can begin operation, it must seek a water discharge permit from DEQ. This permit is required because the plant will discharge treated waste into a waterbody. There is no guarantee that DEQ will issue the permit just because the plans were approved by OPH. In fact, OPH personnel stated that it is possible for DEQ to deny a permit even though OPH approved the plans. If the DEQ permit was denied because of construction deficiencies, the plant owner must then redraw and resubmit the plans for modification to OPH and begin the whole process again (see Exhibit 14 on following page). DEQ believes that the person applying for the permit should know what permit limits are required before applying for the permit to design and construct the facility.

The lack of communication and coordination between these two departments results in an inefficient approval process. These departments should establish a formal way to coordinate these processes to ensure that the design and construction of sewage treatment plants will be capable of compliance with DEQ standards for permit limits. EPA has noted in its 1999 program review of OPH that the plans review for these wastewater treatment plans could be moved to DEQ.

DEQ Comments: DEQ agrees that it is possible for DHH to approve plans and for DEQ to deny a discharge permit. However, DEQ states that this is a failing on the part of the applicant and not of the agencies. The applicant should find out what his discharge limits are going to be before designing the plant.

OPH Comments: OPH stated that it will work with DEQ to form a task force to eliminate inefficiencies and ensure smooth cooperation in permitting these systems.

Exhibit 14
Sewage Treatment Plant Approval Process



Source: Prepared by legislative auditor’s staff using information from DEQ and OPH.

Creation of Drinking Water Revolving Loan Fund Program as Separate Entity Causes Fragmentation

Another organizational structure issue is the creation of the Drinking Water Revolving Loan Fund Program as a separate program from the Safe Drinking Water Program.

The 1996 amendments to the Safe Drinking Water Program authorized the states to set up Drinking Water Revolving Loan Fund Programs (DWRLF) to provide loans to water systems that need improvements in order to meet the federal Primary Drinking Water Standards. OPH set this program up in the Environmental Health division but as a separate program from the Safe Drinking Water Program in Engineering Services. These two programs share staff, funds and responsibilities. For example, two of the engineers working in Engineering Services in the Central Office are currently paid from revolving loan fund monies. The new computer database system for the Safe Drinking Water Program is being funded by the revolving loan fund set aside monies. The revolving loan program conducts capacity development studies and the Safe Drinking Water Program conducts sanitary surveys. An EPA audit of the Safe Drinking Water Program in 1998 stated that sanitary surveys could also be used to assess a system's technical, managerial and financial capacity, the same assessments made in a capacity development study. In addition, when EPA conducts its annual audits of the Safe Drinking Water Program, it includes a review of the revolving loan fund in the audit.

However, OPH officials currently have no plan for how these programs will work together. Therefore, there is an extremely high possibility that these programs will perform duplicate services. OPH officials have said that these programs work together and probably could be combined into one program.

Recommendation

Recommendation IV: The Drinking Water Revolving Loan Fund Program and the Safe Drinking Water Program should be combined into one program.

DHH/OPH Response: OPH disagrees with this recommendation.

Matter for Legislative Consideration 3

The legislature may wish to consider whether water programs could be consolidated into fewer departments. If consolidation is not feasible, the legislature may wish to adopt legislation requiring that DEQ and OPH formally work together on the approval of sewage treatment plants.

DHH/OPH Comments: OPH stated that DEQ and OPH will form a task force to eliminate inefficiencies and ensure smooth cooperation in permitting sewage systems and that the two agencies have already been working on a method to share database information. However, they do not believe that these matters require legislative action.

APPENDIX A

Scope and Methodology

Appendix A: SCOPE AND METHODOLOGY

This performance audit is part of the NSAA's joint performance audit on water quality. This performance audit covers the Department of Environmental Quality, the Office of Public Health within Department of Health and Hospitals, the Department of Natural Resources, the Department of Agriculture and Forestry, and the Department of Transportation and Development. We followed governmental auditing standards and used a general audit plan approved by the National State Auditors Association. However, we revised some steps of this plan to address concerns specific to Louisiana programs. Overall, we conducted similar audit steps for each department. Unless otherwise noted, the methodology below applies to all departments. We primarily focused on fiscal and calendar years covering 1997 through 1999. However, some steps included data back to 1990 to evaluate trends.

We identified which state departments had water quality responsibilities by reviewing state laws and regulations, the 1999-2000 executive budget, and other documents and Internet information; interviewing department staff, and reviewing public documents on each department.

Objective I: Do individual state regulatory programs meet or exceed minimum Environmental Protection Agency standards for drinking water and surface water?

- To determine each department's relationship with the United States Environmental Protection Agency, we interviewed department staff and Environmental Protection Agency officials. We then reviewed Environmental Protection Agency audits of these departments and oversight agreements between these state departments and the Environmental Protection Agency.
- We determined if state standards were at least as stringent as Environmental Protection Agency standards by comparing state law and regulations to federal requirements outlined in the Clean Water Act, the Safe Drinking Water Act, and the Federal Insecticide, Fungicide and Rodenticide Act.

Objective II: Do individual states have an effective monitoring program for drinking water and surface water?

- To determine each state department's procedures for monitoring activities (inspections) that affect state's water quality, we interviewed department staff, obtained and reviewed department policies and procedures, and monitoring reports.
- To determine if monitoring is conducted consistently, effectively, and in accordance with state law, regulations and policies and procedures, we generated a sample of files to review for each department. Specifics on each selection by department are summarized as follows:

- For DEQ, we obtained electronic permit data to determine if DEQ conducted the required inspections on major and minor facilities since fiscal year 1996 for majors and fiscal year 1995 for minors. We also examined a random judgmental sample of 42 minor permits to determine if 1998 and 1999 discharge monitoring reports showed compliance with permit limits.
- For OPH, we generated a judgmental sample of 76 water systems in 8 of 9 regions to determine if OPH was conducting the required number of sanitary surveys since 1990. We used the same sample to determine if water systems were conducting water sampling in 1998 and 1999 in accordance with state and federal law. (**Note:** We did not review files in the Monroe regions because of time constraints).
- For DNR, we generated a random sample of 10 Class I injection wells and 23 Class II injection wells to determine if the department conducted the required inspections and mechanical integrity pressure tests on injection wells in 1998 and 1999. We also looked to see if operators were submitting the required monitoring reports, if DNR was using these reports, and whether these reports were in compliance with permit limits.
- For DAF, we generated a random sample of inspections of commercial applicators in 1999. We reviewed 22 files to determine if inspections were conducted in accordance with policies and procedures and if inspections were sufficient at detecting violations.
- To determine what data are self-reported and how reliable and accurate the data were, we interviewed staff at each department to determine what reports facilities and/or operators submit to the departments on a regular basis. We also determined whether the departments reviewed these reports to ensure that they were accurate. We used the same sample from the file reviews to determine whether these data were submitted, how each department ensured that the data were accurate, and other controls in the departmental processes for verifying self-reported data.
- We determined what state boards and commissions had duties relating to protecting water quality by researching state law and the Internet. We also interviewed some officials serving on some of the boards.
- We researched laboratory certification processes by reviewing state laws, regulations and policies relating to DEQ's laboratory accreditation program and OPH's laboratory certification program. We interviewed officials in both programs to understand the accreditation and certification processes and whether these processes were duplicative. We also contacted the national accreditation authority and other states to determine how other states accredited laboratories.
- Although other state departments certify various persons, (i.e., DOTD certifies water well drillers and OPH certifies water system operators), we only reviewed whether DAF was ensuring that commercial applicators of pesticides maintained and renewed their

certifications. We reviewed this information during our file review of inspections to determine if the inspectors were checking whether the applicators held current licenses or certifications.

- To determine what state departments are doing to monitor for nonpoint source pollution, we interviewed all departments, reviewed their policies and procedures, and obtained lists of such projects each department was involved in.

Objective III: Do individual states apply corrective actions effectively?

- We determined what constitutes violations for each department and what enforcement (corrective) actions are available by reviewing state and federal laws, regulations and policies and interviewing the department's staff.
- We obtained lists of violations and enforcement actions from each department and conducted file reviews. Specific sampling methods and procedures for the file review are summarized below.
 - For DEQ, we obtained an electronic list of all violations and enforcement actions for calendar years 1998 and 1999. Using special audit software, we then pulled a random judgmental sample of 58 permit files. We reviewed these files to determine if DEQ was assessing enforcement actions appropriately, whether enforcement actions were escalated appropriately, and whether DEQ's choice of enforcement action was an effective deterrent to noncompliance. To do this, we used DEQ's enforcement response guide as a general outline for appropriateness. We also used DEQ's levels of enforcement. To evaluate whether the action was an effective deterrent, we evaluated whether the facility had similar subsequent violations (from 1995 and later). We also determined how timely the enforcement actions were based on auditor judgment since there was no strict criteria to identify timeliness.
 - For OPH, we obtained an electronic list of all violations and enforcement actions for calendar years 1998 and 1999. We conducted a file review on 76 water systems in eight regions to determine if OPH was following enforcement procedures. Specifically, whether water systems notified the public of the presence of coliform in water and whether OPH responded to coliform violations with the appropriate enforcement action. We also determined whether OPH addressed violations found during sanitary surveys and whether OPH conducted follow-up on these violations.
 - For DNR, we obtained an electronic list of violations and enforcement actions from calendar year 1999 to determine if DNR issued enforcement actions consistently. We reviewed a judgmental sample of 25 violations of a similar nature to determine if similar violations received similar enforcement actions. However, since DNR does not have criteria for what enforcement actions to issue

for certain violations, we were unable to evaluate whether these actions were appropriate.

- For DAF, we attempted to obtain an electronic list of violations and enforcement actions for calendar year 1998 and 1999. However, this list did not match what DAF gave us previously and what DAF reported to EPA. We eventually used all warning letters sent in calendar year 1999 and selected a sample of 25 warning letters and eight hearings. We evaluated whether DAF issued enforcement actions consistently and appropriately using its enforcement response policy and penalty matrix.

Objective IV: Are water quality responsibilities fragmented?

- To determine whether water quality responsibilities are fragmented, we determined how other states water quality responsibilities are located within state departments. We determined this by researching relevant Internet sites in each state.
- We also noted areas of potential fragmentation throughout the course of the fieldwork for the other objectives and followed up with relevant state departments on these issues. We specifically concentrated on the laboratory accreditation processes and the sewage treatment plant approval process.

Other Work Performed:

- We interviewed the director of Environmental and Legal Affairs for the Louisiana Chemical Association; Dr. Paul Templet, LSU Institute for Environmental Studies; and the Louisiana Municipal Association to obtain their opinions on how state departments were protecting water quality.
- We determined how DEQ developed Total Maximum Daily Loads by reviewing requirements and regulations, interviewing department staff, and reviewing DEQ's Water Quality Inventory and impaired waterbody list.

APPENDIX B

Glossary of Environmental Terms

Appendix B: Glossary of Environmental Terms Used in Report

Annulus Pressure: A pressure measured at the surface in pounds per square inch and applied to the downhole portion of an injection well located between the injection tubing, isolation packer, and innermost cemented casing. Monitoring the annular pressure is an indicator of well mechanical integrity.

Aquifer: A natural underground layer, often of sand or gravel that contains water.

Coliform: A group of related bacteria whose presence in drinking water may indicate contamination by disease-causing microorganisms.

Designated water use: A use of the waters of the state as established by the Louisiana Water Quality Standards. These uses include, but are not limited to, recreation, propagation of fish and other aquatic life and wildlife, including oysters, public water supply, agricultural activities and outstanding natural resource waters.

- **Agriculture:** The use of water for crop spraying, irrigation, livestock watering, poultry operations and other farm purposes not related to human consumption.
- **Drinking water supply:** A surface or underground raw water source which, after conventional treatment, will provide safe, clear, potable and aesthetically pleasing water for uses which include but are not limited to, human consumption, food processing and cooking, and as a liquid ingredient in foods and beverages.
- **Fish and wildlife propagation:** The use of water for preservation and reproduction of aquatic biota.
- **Outstanding natural resource waters:** Waterbodies designated for preservation, protection, reclamation, or enhancement of wilderness, aesthetic qualities, and ecological regimes, such as those designated under the Louisiana Natural and Scenic Rivers System or those designated by the office as waters of ecological significance.
- **Oyster propagation:** The use of water to maintain biological systems that support economically important species of oysters, clams, mussels, or other mollusks so that their productivity is preserved and the health of human consumers of these species is protected.
- **Primary contact recreation:** Any recreational activity which involves or requires prolonged body contact with the water, such as swimming, water skiing, tubing, snorkeling and skin-diving.
- **Secondary contact recreation:** Any recreational activity which may involve incidental or accidental body contact with the water and during which the

probability of ingesting appreciable quantities of water is minimal, such as fishing, wading and recreational boating.

Dissolved oxygen: The amount of oxygen dissolved in water, commonly expressed as a concentration in terms of milligrams per liter, mg/l.

Effluent: Wastewater discharged to waters of the state.

Effluent Excursion: An occurrence when a facility exceeds its permitted effluent limits.

Effluent limitation: Any applicable state or federal quality or quantity limitation, which imposes any restriction or prohibition on quantities, discharge rates and concentrations of pollutants that are discharged into waters of the state.

Fracture Pressure: The pressure level at which the subsurface formation may fracture.

92-500 Facility: A minor facility that was funded under Public Law 92-500 of the Clean Water Act.

Major Facility: A facility that has a design flow effluent rate of greater than one million gallons per day.

Maximum Authorized Surface Injection Pressure (MASIP): The maximum pressure, in pounds per square inch (PSI), that is to be applied at the surface of an injection well to facilitate disposal or injection of fluids into subsurface formations.

Maximum Contaminant Level (MCL): The highest level of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk.

Mechanical Integrity Pressure Test (MIPT): A test performed to determine the integrity of the construction of the well. The well is pressurized for a designated period of time to determine if there are leaks indicated by a drop in pressure.

Minor Facility: A facility that has a design flow effluent rate of less than 1 million gallons per day.

Nonpoint source: A diffuse source of water pollution that does not discharge through a point source or pipe, but instead flows freely across exposed natural or man-made surfaces, such as plowed fields, pasture land, construction sites and parking lots.

Point source: A discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged.

Public Water System: Any water system that provides water to at least 25 people for at least 60 days annually.

Secondary Drinking Water Standards: Non-enforceable federal guidelines regarding cosmetic effects (such as tooth or skin discoloration) or aesthetic effects (such as taste, odor, or color) of drinking water.

Source Water: Water in its natural state, prior to any treatment for drinking.

Surface Water: The water that systems pump and treat from sources open to the atmosphere, such as rivers, lakes, and reservoirs.

Total Coliform Rule: Federal rule that outlines monitoring requirements for coliform.

Turbidity: The cloudy appearance of water caused by the presence of tiny particles. High levels of turbidity may interfere with proper water treatment and monitoring.

UIC-10 form: An annual reporting form of the Office of Conservation titled the Annual Saltwater Disposal Well Report. The form is completed and submitted annually by all operators of Class II saltwater disposal wells. The form provides a method of reporting data on the well's injection pressure, volume of fluids disposed, well construction, and other operational data.

UIC-21 form: A monthly reporting form of the Office of Conservation called the Commercial Class II Daily Monitor Log. The form is completed and submitted monthly by operators of injection wells used for the commercial disposal of oil and gas exploration and production waste. The forms provide a method of reporting data on the well's injection pressure, annular pressure, and fluid injection rate.

Wastewater: Liquid waste resulting from commercial, municipal, private or industrial processes. This includes but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste and contaminated rainwater runoff.

Waterbody: Any contiguous body of water identified by the state. A water body can be a stream, a river, a segment of a stream or river, a lake, a bay, a series of bays, or a watershed.

Wellhead Protection Area: The area surrounding a drinking water well or well field which is protected to prevent contamination of the well(s).

APPENDIX C

1997 and 1998 Top Five Toxic
Releases by Parish,
Facility and State

Appendix C: Top Five Toxic Releases by Parish, Facility and State for 1998 and 1997

1998 Total Annual Releases to Surface Water – Top Five Parishes

Rank	Parish	No. of Facilities	Pounds Released
1	Ascension	18	21,498,277
2	St. James	9	8,556,490
3	East Baton Rouge	24	3,786,348
4	Iberville	18	1,061,784
5	Calcasieu	29	431,311

1998 Total Annual Releases to Surface Water – Top Five Facilities

Rank	Facility	Pounds Released
1	PCS Nitrogen Fertilizer (Ascension Parish)	19,702,087
2	IMC-AGRICO Chemical Company- Faustina (St. James Parish)	5,805,841
3	Exxon – Baton Rouge Refinery (East Baton Rouge Parish)	3,393,550
4	IMC-AGRICO Chemical Company (St. James Parish)	2,736,301
5	BASF Corporation (Ascension)	1,084,265

1997 Total Annual Releases to Surface Water – Top Five States

Rank	State	Pounds Released
1	Louisiana	46,909,318
2	Pennsylvania	38,517,920
3	Texas	20,788,710
4	Mississippi	11,945,812
5	Florida	8,636,614

1997 Total Annual Releases to Underground Injection Class I Wells – Top Five States

Rank	Facility	Pounds Injected
1	Texas	89,929,406
2	Louisiana	54,243,582
3	Florida	27,506,942
4	Ohio	11,584,640
5	Tennessee	9,273,267

Source: Prepared by legislative auditor's staff using data from the 1998 Toxic Release Inventory compiled by DEQ.

APPENDIX D

Summary of EPA Audit Findings for
Federal Fiscal Years 1998 and 1999

Appendix D: Summary of EPA Audit Findings for Federal FY's 1998 and 1999

Department	Federal Fiscal Year 1998 Findings	Federal Fiscal Year 1999 Findings
Department of Environmental Quality	<ul style="list-style-type: none"> ▪ DEQ has a 90.6% backlog on issuing and renewing permits. ▪ DEQ generally addressed violations timely and appropriately. 	<ul style="list-style-type: none"> ▪ DEQ has a 47.6% backlog on issuing and renewing permits DEQ did not initiate enforcement actions for some noncompliant facilities. ▪ DEQ did not address violations on significant minor facilities in a timely manner. ▪ The number of enforcement actions decreased from 1998 to 1999.
Department of Health and Hospitals, Office of Public Health	<ul style="list-style-type: none"> ▪ OPH did not complete 83% of sanitary surveys on surface water systems and 75% of sanitary surveys on groundwater systems. ▪ EPA noted concern over the OPH organization structure and staff vacancies, specifically the fact that OPH regional staff do not report to the Central Office. ▪ OPH has an aggressive enforcement program and has a monitoring compliance rate of 99%. 	<ul style="list-style-type: none"> ▪ OPH did not complete 77% of sanitary surveys on surface water systems and 32% of surveys on groundwater systems. ▪ EPA recommended that OPH adopt a centralized organization structure and address staffing needs. ▪ OPH continues to have aggressive enforcement program and a 99% monitoring compliance rate.
Department of Natural Resources	<ul style="list-style-type: none"> ▪ DNR met inspection requirements as outlined in the annual workplan. ▪ DNR's inspection procedures are generally inadequate to verify operator compliance with UIC requirements. ▪ Monitoring reports are not evaluated for compliance with permit limits. ▪ DNR's computer system is inadequate to track enforcement actions, resulting in undiscovered noncompliance. 	<ul style="list-style-type: none"> ▪ Some Class II wells have not demonstrated mechanical integrity.
Department of Agriculture and Forestry	<p>EPA noted concern over the number of inspections versus the number of inspection actions and the decrease in enforcement actions from the previous year.</p>	<ul style="list-style-type: none"> ▪ EPA commended DAF on fish kill investigations and investigations involving methyl parathion and fipronil. ▪ EPA recommended that DAF develop a written policy for issuing warning letters.

Source: Prepared by legislative auditor's staff using information from EPA audits issued in federal fiscal years 1998 and 1999.

APPENDIX E

Nonpoint Source Pollution Projects Approved in 1998

Appendix E: Nonpoint Source Pollution Projects Approved in 1998

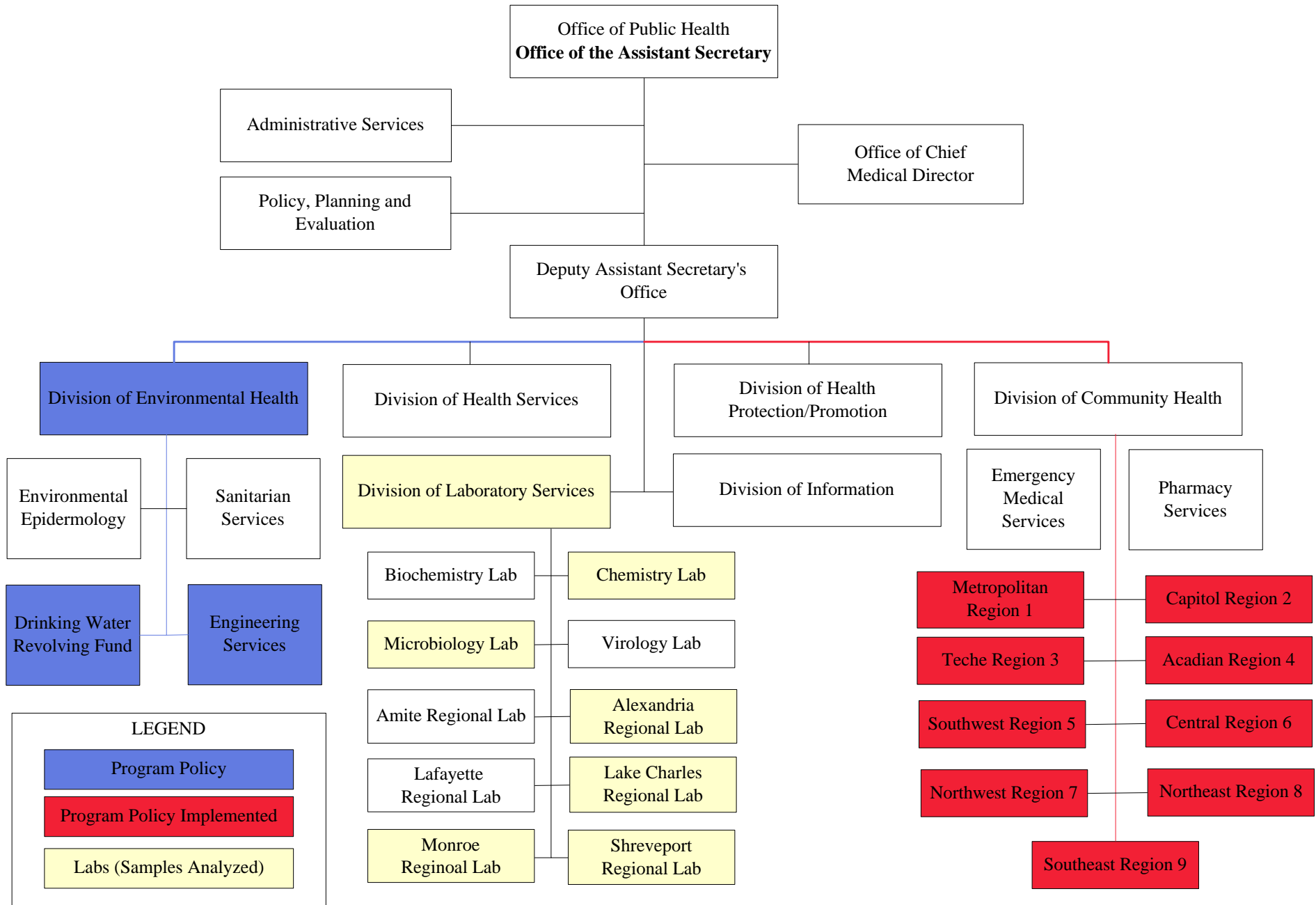
Contractor	Title of Project	State Match	Federal Match	Total Funds	OBJECTIVE
Local Soil and Water Conservation Districts	Statewide Nonpoint Source Education Program	\$132,000	\$198,000	\$330,000	To strengthen the support of the Local Soil and Water Conservation Districts who provide education and technical assistance to farmers who live within the 21 statewide EQUIP Geographic Priority Areas, as well as the four natural resource priority concerns, including wellhead protection which is a high priority for the Office of Soil and Water Conservation.
Rapides Area Planning Commission	Mandatory Sewer Inspection Program for Rapides Parish	\$83,134	\$125,000	\$208,134	To establish a home sewer inspection program for the unincorporated areas of Rapides Parish, Louisiana and to utilize this program as a pilot for similar programs in other parishes across the state where water quality is not meeting its designated uses because of exceedances on the numerical criteria for fecal coliform bacteria.
LSU Agriculture Center	Innovative Use of Poultry Litter on Forested Areas	\$179,630	\$168,814	\$348,444	To implement this demonstration project and evaluate water quality benefits of application of poultry waste to forested lands within Louisiana.
Avoyelles Soil and Water Conservation District	Spring Bayou Water Quality Project	\$83,014	\$130,784	\$213,798	To improve water quality in Coulee Des Grues by demonstration of agricultural best management practices (BMPs) which will reduce turbidity and suspended solids from row crop agriculture.
St. Landry Soil and Water Conservation District	Upper Mermentau River Water Quality Project	\$213,484	\$484,750	\$698,234	To improve water quality in Bayou Duralde-Cannes, Bayou Nezpique, Bayou Mallet and its tributaries. In order to accomplish this goal, sediment discharges from rice fields must be reduced.
Morehouse Soil and Water Conservation District	Bayou Bartholomew Special Water Quality Project	\$242,609	\$284,830	\$527,439	To improve the water quality in Bayou Bartholomew by demonstrating agricultural BMPs that are targeted at reduction of pesticides, nutrients, organic enrichment, suspended solids, and pathogen indicators.
Dugdemonia Soil and Water Conservation District	Jackson Parish Special Water Quality Project	\$90,540	\$135,000	\$225,540	To implement poultry BMPs to reduce the amount of agricultural pollution entering Castor Creek Caney Lake.
Northeast Resource Conservation and Development District	The Tensas River Watershed Comprehensive Nonpoint Source Pollution Reduction Program Phase II	\$218,486	\$277,285	\$495,771	To improve water quality in the Tensas River and its tributaries by reducing sediments, nutrients, and pesticides associated with the production of row crop agriculture.

Contractor	Title of Project	State Match	Federal Match	Total Funds	OBJECTIVE
LSU-Agricultural Experiment Station	Fate of Atrazine Herbicide in Soils as Affected by Sugarcane Management Practices	\$96,826	\$139,638	\$236,464	To compare the concentration of atrazine in surface water runoff from sugarcane grown under conventional practices and Best Management Practices.
Acadiana Resource Conservation and Development	Teche-Vermilion Blue Thumb	\$386,590	\$203,581	\$590,171	To educate the public about their impact on surface water.
Military Department	Road Construction Best Management Project Demonstration Project with the Louisiana Military Department	\$20,000	\$30,000	\$50,000	To control erosion, protect the resource base and improve and protect water quality through nonpoint source pollution control.
Anthony Lewis	Provide Technical Support for the Land Use Classification of Remotely Sensed Critical Watersheds in Louisiana	N/A	N/A	\$29,750	Provide technical support for the land use classification of remotely sensed critical watersheds in Louisiana. Each critical watershed will be treated independently.
Source: Prepared by legislative auditor's staff using information from Department of Environmental Quality, Fiscal Services Division.					

APPENDIX F

Office of Public Health Organizational Structure

Appendix F: Office of Public Health Organizational Chart



APPENDIX G

Office of Public Health Districts,
Regions and Parishes

Appendix G: Office of Public Health Districts, Regions, and Parishes

DISTRICT	REGION	PARISH	
1 New Orleans (60 systems)	1 New Orleans (20 systems)	051 Jefferson 071 Orleans	075 Plaquemines 087 St. Bernard
	3 Thibodaux (40 systems)	007 Assumption 057 Lafourche 089 St. Charles 093 St. James	095 St. John 101 St. Mary 109 Terrebonne
2 Baton Rouge (907 systems)	2 Baton Rouge (272 systems)	005 Ascension 033 E. Baton Rouge 037 East Feliciana 047 Iberville	077 Pointe Coupee 121 W. Baton Rouge 125 West Feliciana
	6 Alexandria (157 systems)	009 Avoyelles 025 Catahoula 029 Concordia 043 Grant	059 LaSalle 079 Rapides 115 Vernon 127 Winn
	9 Mandeville (478 systems)	063 Livingston 091 St. Helena 103 St. Tammany	105 Tangipahoa 117 Washington
3 Lafayette (413 systems)	4 Lafayette (275 systems)	001 Acadia 039 Evangeline 045 Iberia 055 Lafayette	097 St. Landry 099 St. Martin 113 Vermilion
	5 Lake Charles (138 systems)	003 Allen 011Beauregard 019 Calcasieu	023 Cameron 053 Jefferson Davis
4 Shreveport (481 systems)	7 Shreveport (262 systems)	013 Bienville 015 Bossier 017 Caddo 027 Claiborne 031 DeSoto	069 Natchitoches 081 Red River 085 Sabine 119 Webster
	8 Monroe (219 systems)	021 Caldwell 035 East Carroll 041 Franklin 049 Jackson 061 Lincoln 065 Madison	067 Morehouse 073 Ouachita 083 Richland 107 Tensas 111 Union 123 West Carroll
Source: Prepared by legislative auditor's staff using data obtained from the Department of Health and Hospitals, Office of Public Health.			

APPENDIX H

Examples of Lab Reports for State and Non-State Laboratories

Appendix H: Examples of Lab Reports for State and Non-State Laboratories

Project Code 6873

LAB USE ONLY
 Lab Sample & Lab Nos
 Lab Date and Time Received

LOUISIANA D.H.H. OFFICE OF PUBLIC HEALTH
 DIVISION OF LABORATORIES - WATER MICROBIOLOGY
LABORATORY REQUEST AND REPORT FORM

Name of Supply _____
 Address _____
 City _____ State _____ Zip _____ Parish _____ Collected by _____

Public Water Supply ID (PWS ID) _____ (1-7)
 Date Collected 10/13/98 (8-13)
 Time Collected 09:59 (14-17)
 Point of Collection (POC) or POC ID _____ PLEASE PRINT OR TYPE _____ (18-47)

*Note: All repeat drinking water samples should have the lab sample no. of the related positive sample in parentheses at the end of the POC - eg. (203406) (18-47)

TYPE OF SAMPLE

Drinking Water Program

1. Routine
 2. Replacement
 3. *Repeat - Original Tap
 4. *Repeat - Upstream Tap
 5. *Repeat - Downstream Tap
 6. *Repeat - Additional Tap
 7. Investigative
 8. Other - Describe above in POC

Other Potable
 1. New Facility (Line, Well, etc.)
 2. Well
 3. Private Supply
 4. Other - describe below in comments

Non Potable
 1. Raw Water
 2. Surface Water
 3. Recreation Water (Bathing Area)
 4. Sewage
 5. Other - describe below in comments

Comments / Special Tests _____
 Disinfectant Residual
 Free ppm CL2 0.1
 Total ppm _____

LABORATORY USE ONLY

MMO-MUG Total Coliform P/A
 0. Not Found
 1. Present 1 (48)

MMO-MUG E. Coli P/A
 0. Not Found
 1. Present 0 (50)

MMO-MUG Total Coliform MPN / 100 ml _____
 Multiple Tube Fermentation Total Coliform MPN / 100 ml _____
 Standard Plate Count / 1ml _____

MMO-MUG E. coli MPN / 100 ml _____
 Multiple Tube Fermentation Fecal Coliform MPN / 100ml _____
 Other Tests _____

Remarks _____

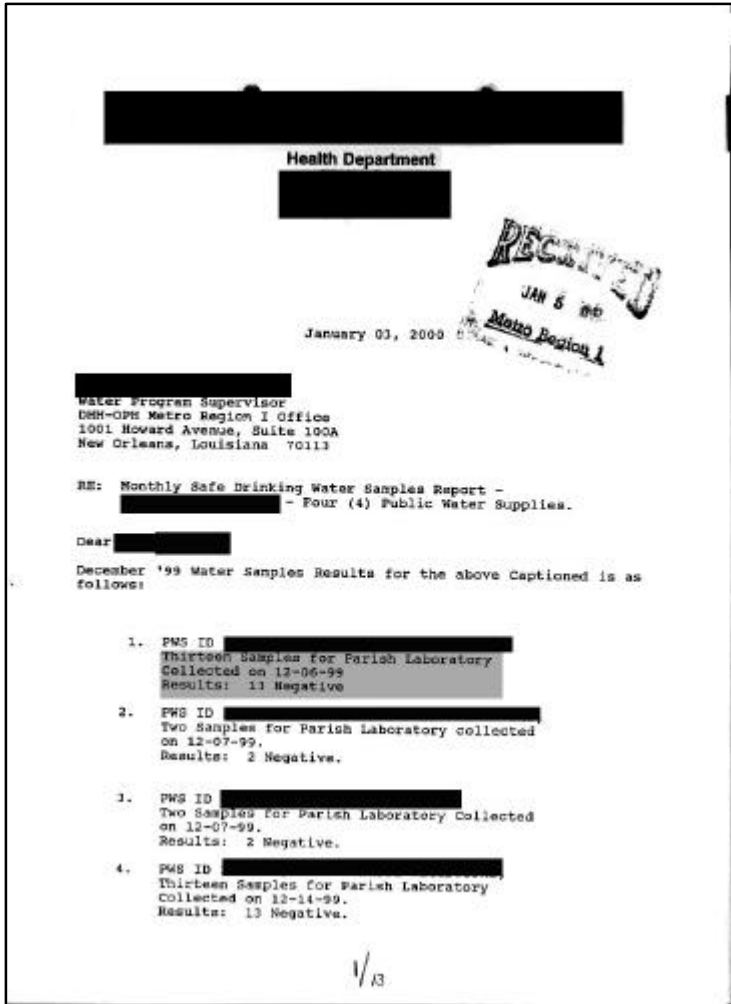
Date Analyzed: 10-13-98
 Time Analyzed: 14:45
 Analyst: _____

REGIONAL ENGR. COPY Sample No: R **092438**

DETACH AND PLACE NUMBERED TAG ON SAMPLE BOTTLE CAP R

Source: Prepared by legislative auditor's staff using OPH files.

This is an example of the laboratory report used by the state laboratories for total coliform tests. This form is used for each sample and contains information on where the sample was collected, what type of sample was collected, the results of the total coliform test and the results of the E. Coli test, if it was necessary.



These two lab analysis reports are examples from non-state owned laboratories. One of the main differences demonstrated by comparing these reports to the state laboratory reports is that these only show totals rather than individual sample results. As a result, it is impossible for OPH personnel to determine where a potential problem is and whether or not repeat and routine samples were collected appropriately.

Source: OPH files

DISTRIBUTION SYSTEM MONITORING REPORT
June 2000

Total Number of Samples Required:	150
Total Number of Samples Collected:	215
Total Number of Positive Total Coliform Samples:	1
Total Number of Positive Fecal Coliform Samples:	0
Percent of Samples Positive for Total Coliform:	0.47%

Total Number of Chlorine Residuals Measured (a):	215
Total Number of Zero Residuals Evaluated by HPC:	0
Total Number of HPC only samples (b):	0
Total Number of Zero Residuals with no HPC (c):	0
Total Number of Zero Residuals (HPC > 500) (d):	0
Total Number of HPC only samples with HPC > 500 (e):	0
Percent of Undetectable Chlorine Residuals (V=100(c+d+a)/(a+b)):	0.0%

FIELD SITE LOCATIONS NOT SAMPLED: 19,50,51,52,59,60,65,66

FIELD SITE LOCATIONS SAMPLED:	
1 per month:	15,36,39,41-42,54,57,61-62,64,67,75,79-80
2 per month:	1,3,8,11-14,16-18,20-29,31-35,37-38,40,43,45-46,48-49,53,55-56,59,63,68-74,76-78,81-83
3 per month:	2,4-5,7,9-10,30,44,47,84
4 per month:	6

TREATMENT PLANT LINE-TO-MAIN SAMPLES:


21 per month:	85
23 per month:	86
21 per month:	87

RECEIVED
JUL 17 2000
Metro Region I


APPENDIX I

Example of Public Notification
Letter Sent by OPH to
PWS With Violations

Appendix I: Example of Public Notification Letter Sent by OPH to PWS With Violations


M. J. "Mike" Foster, Jr.
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS


LOUISIANA
Department of
HEALTH and
HOSPITALS
David W. Hood
SECRETARY

July 19, 1999

FILE COPY

CERTIFIED MAIL - (Z 146 636 050) - RETURN RECEIPT REQUESTED

[REDACTED]

Re: Safe Drinking Water Act:
Public Notification of Non-Compliance
Tier 1 Bacteriological MCL Violation
Community Water Supply

[REDACTED]

ENTERED
AUG 2 1999

Gentlemen:

Pursuant to the requirements of the Amended Safe Drinking Water Act (42 U.S.C.A. 300f et seq.) which have been incorporated into the Louisiana State Sanitary Code, failure to comply with various provisions of the Act requires water supplies to inform their consumers of such non-compliance.

Upon review of the records of this office, the above water supply was found to be in non-compliance with the requirements of the Act during the period from July 1, 1999 thru July 31, 1999. The non-compliance (and the requirement for public notification) was determined as a result of the above supply exceeding the maximum contaminant level in bacteriological tests performed on water from the supply.

Therefore, you are hereby advised that this failure to meet the requirements of the Act requires that you notify all customers on the system (including "new" tie-ins) of this non-compliance by both of the following methods:

1. By notice published in a general circulation newspaper serving the area within 14 days from receipt of this letter; and
2. By direct mail or hand delivery to each customer within 4 days from receipt of this letter.

5
OFFICE OF PUBLIC HEALTH • CAPITOL REGION II
1772 WOODDALE BOULEVARD • BATON ROUGE, LOUISIANA 70806
PHONE 504/925-7200 • FAX 504/925-7245
AN EQUAL OPPORTUNITY EMPLOYER

Re: Public Notification of Non-Compliance
Tier 1 Bacteriological MCL Violation
Community Water Supply

Page 2

The Act requires the notice include the following statements:

During the reporting period of July 1, 1999 thru July 31, 1999, the Town of Ferriday water supply violated the maximum contaminate level of coliform bacteria as set forth in the State and Federal Primary Drinking Water Regulations (the Act). Action has been taken to eliminate the contamination.

The United States Environmental Protection Agency (U.S. EPA) sets drinking water standards and has determined that the presence of total coliform bacteria is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with treatment or the pipes which distribute the water, and indicates the water may be contaminated with organisms which can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risks of these adverse health effects. Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

The Act further requires that the notice include the telephone number of the owner, operator or designee of the public water system as a source of additional information concerning the notice.

Keep in mind there are specific deadlines by which to notify your customers. You should, therefore, avoid any delays in making your notifications. Failure to comply with this requirement for public notification may result in enforcement action being taken against your water supply by the State of Louisiana and/or the U.S. EPA.

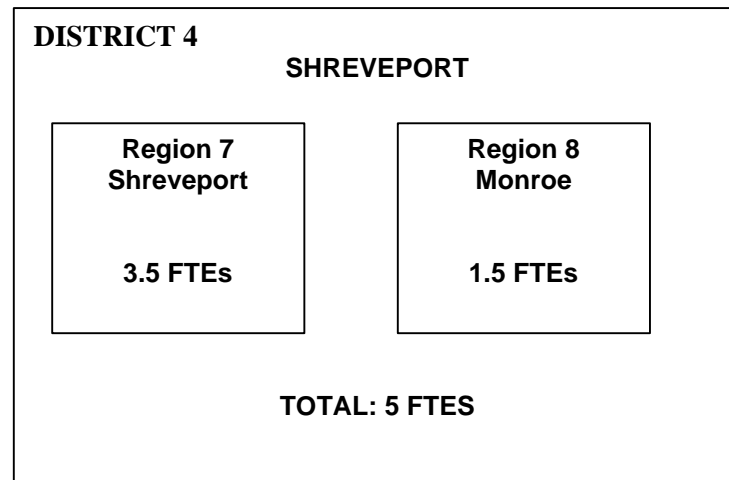
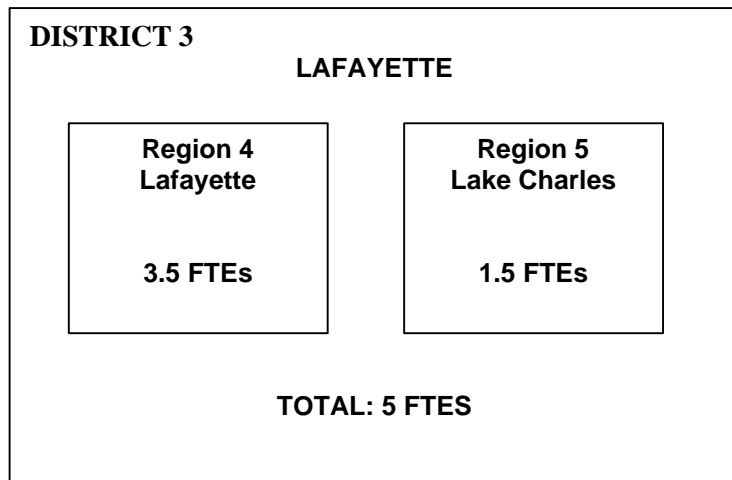
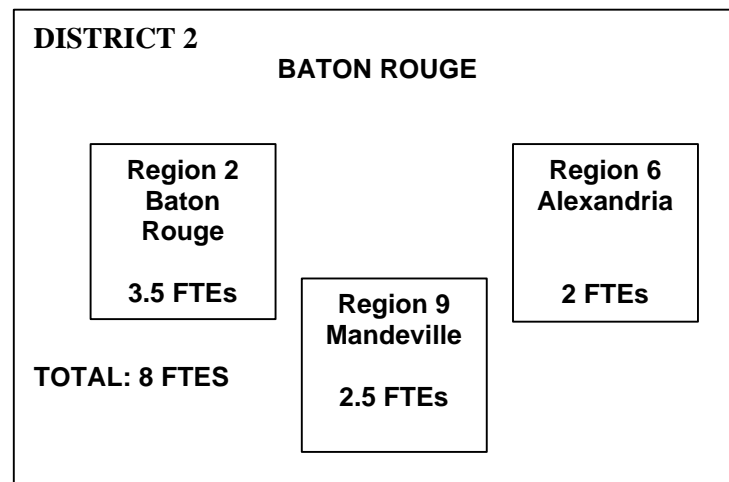
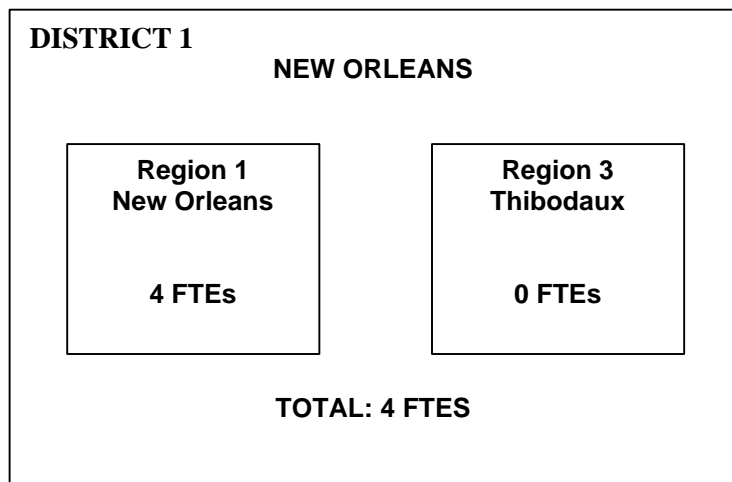
Public notification must be verified by supplying this office a copy of the public notice, as published in the newspaper, including the date of publication, and a copy of the notice sent to your customers. Verification of your actions is necessary to insure that State and U.S. EPA records of this matter are accurate and complete. Please advise this office of your action in this matter within 14 days from receipt of this letter.

This is an example of the letter that is sent from the district OPH office to the public water system when the public water system violates a maximum contaminant level or has a monitoring violation.

APPENDIX J

Staffing Levels at District and Regional OPH Safe Drinking Water Offices

Appendix J: Staffing Levels at District and Regional OPH Safe Drinking Water Offices



APPENDIX K-1

Department of Environmental Quality's Response

This letter was written as a response to a draft copy of our audit report. This final audit report contains revisions made as a result of the exit conference and this response letter. Therefore, some statements in the department's response letter may have already been addressed in this final audit report. In addition, each department only received a copy of its portion of this audit. Therefore, page numbers in the response may not correspond with actual page numbers in this report.



State of Louisiana

Department of Environmental Quality



M.J. "MIKE" FOSTER, JR.
GOVERNOR

J. DALE GIVENS
SECRETARY

December 22, 2000

Dr. Daniel G. Kyle
Office of the Legislative Auditor
P.O. Box 94397
Baton Rouge, Louisiana 70804-9397

RECEIVED
 LEGISLATIVE AUDITOR
 00 DEC 22 PM 4:02

Dear Dr. Kyle:

Please consider the attached as our response to the draft audit report that was provided to the Department of Environmental Quality (DEQ) by your team of auditors on Friday, December 8, 2000. We have expressed some of our concerns with your auditors already and are hereby providing some additional information to you in an effort to allow them to correct what we feel are inaccuracies in the draft report. Although some suggested changes we provided were made, we believe further changes are warranted.

By all accounts from my staff, we believe the team of auditors that have been working on this project have performed in a very professional manner. We provided information to your auditors to the best of our ability, but I think there are some areas where we probably could have done a better job had we had the benefit of a little more information. We would still like to obtain a copy of the audit plan, which I assume you can share with us now that the audit is officially over.

While the audit pointed out a few areas where improvements can be made in our operation, and in fact we were already moving forward to address some of them, we have to strongly disagree with some of your conclusions. In those cases, there is no detailed evaluation of the statement in the audit, and it appears that pre-conceived ideas were identified as recommendations without the auditors having thorough insight into the programs involved.

Please be advised that we may provide your office with additional comments after we have had the opportunity to review the report in its entirety. We thank you for allowing us to comment on the draft report and look forward to working cooperatively with you to ensure the full audit report reflects accurately on the true strengths and weaknesses of our overall water program prior to being released to the public.



Dr. Dan Kyle
December 22, 2000
Page 2

Specific, line-by-line comments are attached on the following pages. If there are any questions, please contact me or Linda Levy at 765-0491.

Sincerely,

A handwritten signature in cursive script that reads "J. Dale Givens". The signature is written in black ink and is positioned above the printed name and title.

J. Dale Givens
Secretary

Attachment

Specific Comments on DEQ's Portion of
Legislative Auditor's Report on
Water Quality Programs

Page 1 of 26. **Louisiana Water Facts.** The report says there are "about 1850 water systems", yet the totals for surface water and ground water systems add up to only 1760. These numbers should be reconciled.

Page 1 of 26. **Status of Louisiana's Water.**

- First Bullet. A. There is an asterisk after this statement but no explanation of the asterisk. B. As indicated in our initial response, making such a statement without benefit of the full knowledge of the evaluation and listing process is misleading and unproductive.
- Second Bullet. The first statement is purposefully misleading. Adding the second statement is all but useless. The fact is, and should be stated unequivocally, that of the 35 waterbody subsegments for which "drinking water supply" is a designated use, 34 of those meet that designated use. The one subsegment that is impaired for that use was for a color violation.
- Third Bullet. According to the most recent information available, Louisiana ranks 2nd, not 1st in TRI releases to surface water.
- Fifth Bullet. We have had a problem duplicating your percentages and would like clarification on which lists or documents you used. This applies to Bullets 1 and 2 also.
- Sixth Bullet. This statement is incorrect and was inadvertently not pointed out as such to the auditors in our initial response to the draft report. Based on the *1998 Water Quality Inventory*, the top three suspected sources of impairment are municipal point sources, land disposal (septic tanks, a form of nonpoint source of pollution), and atmospheric deposition (related to mercury contamination of fish and another form of nonpoint source pollution). Agriculture (another nonpoint source of pollution) is the fourth most frequently cited source of impairment. Industrial point sources actually ranked seventh, following urban runoff and package sewer plants.
- Seventh Bullet. This statement is incorrect and was inadvertently not pointed out as such to the auditors in our initial response to the draft report. Based on the *1998 Water Quality Inventory*, oil and grease was the seventh ranked suspected cause of impairment. The inclusion of metals would be more correct than oil and grease. However, even this needs explanation. Sampling and analysis methodologies have inherently introduced metals to water quality samples, leading to a large number of waterbodies being identified as not meeting water quality standards. However, current work indicates that the majority of these waterbodies will drop off the impaired list as we are able to apply "clean techniques" to our sampling and analyses.

Page 1 of 26, Paragraph 2. It is important to note the distinction between the *Water Quality Inventory* and the *Source Water Assessment Document*. The *Source Water*

Assessment Document deals with potential risks to drinking water based on a history of past contamination or imminent contaminant episodes. The Source Water Assessment Program does not evaluate water body impairment, but does indicate susceptibility to contamination from the potential source assessment and hydrologic considerations.

Page 2 of 26, Paragraph 1. As stated earlier, the main suspected sources of impairment are municipal point sources, land disposal (septic tanks, a form of nonpoint source of pollution), and atmospheric deposition (related to mercury contamination of fish and another form of nonpoint source pollution).

Page 2 of 26, Paragraph 2. It is important to note that with the removal of phosphoric acid from the list of TRI chemicals, Louisiana's rank will drop dramatically on future lists.

Page 2 of 26, Paragraph 3. This paragraph unfortunately leaves the reader with the impression that were it not for the releases discussed in the previous paragraphs, water systems would not have to treat the water before it could be used. This is not the case. Many naturally occurring substances or conditions necessitate the treatment of water prior to its use. Also drinking water standards are applied at the tap, not at the source.

Page 3 of 26, Paragraph 2 under **Department of Environmental Quality (DEQ)**.

- Second Bullet. The Office of Environmental Compliance performs inspections, samples water and issues enforcement actions for violations of the Louisiana Environmental Quality Act and the Environmental Regulatory Code. Not only permit violations but other regulatory violations are also addressed through the issuance of enforcement actions.

Page 3 of 26, Paragraph 1 under *Monitoring Activities*. To say that "DEQ has prioritized which basins are sampled first based on the impaired waterbodies list" is partially but not totally correct. The order of sampling coincides with the TMDL development schedule that DEQ and EPA agreed upon in 1997. That schedule was based on a number of factors, one of which was the number of waterbody subsegments in each basin that were on the list.

Page 3 of 26, Paragraph 2 under *Monitoring Activities*. It should be noted that not all inspections consist of water sampling.

Page 5 of 26. **34% of Major and Significant Minor Facilities Not Inspected According to Law.** This headline gives the reader a misleading impression that 34% of the facilities reviewed did not receive inspections, period. That is not the case. All facilities were inspected, and most of them received inspections each and every year. For the purpose of this discussion, the five fiscal years for which the review was conducted need to be divided into 2 categories. During the first category, which includes FY96 and FY97, DEQ and EPA agreed upon which inspections each agency would conduct. This allowed each to better utilize staff and prevent duplication of effort. Of the facilities identified as not receiving inspections during these 2 fiscal years, we believe that the

majority of them were ones that EPA had indicated to us that they would conduct. Please refer to the attached memo from David Brightbill to David Oge' as an example of this. During the second category, which includes FY98, FY99 and FY00, DEQ has done an excellent job of completing the required inspections. Some of those "missed" inspections were in fact conducted but not counted because they fell slightly outside the fiscal year. Examples of this are:

- Town of Plain Dealing, LA0020044, was inspected 5/27/98, 7/21/99 and 4/17/00 (3 times in 3 years), but the 7/21/99 inspection was considered "missed" because it was conducted 21 days into the next fiscal year.
- Town of Cullen, LA0032301, was inspected 7/6/98, 8/2/99 and 6/16/00 (3 times in 3 years), but one of these did not count.
- Village of Gilbert, LA0049859, was inspected 7/22/98 and 2/11/99, but the FY98 inspection was considered "missed" because it was conducted 22 days into the next fiscal year.
- Town of Haynesville, LA0034614, was inspected 4/30/98, 7/29/99, and 3/23/00 (3 times in 3 years) but the 7/29/99 inspection was considered "missed" because it was conducted 29 days into the next fiscal year.

As you can see, these facilities have in no way been ignored. When looking at the situation in its entirety, we believe it is misleading to use that headline. DEQ does appreciate the fact that the auditors included the annual counts in Exhibit 4 as we requested.

Page 6 of 26. **10% of Minor Facilities May Have Never Been Inspected.** DEQ has identified a number of inspections that were conducted on facilities that are identified on the auditor's list of "never inspected" facilities list and the "not inspected in 3 years" list. We are including spread sheets and inspection reports for verification. Additionally, some of the facilities identified on the lists have more than one permit associated with them, i.e., a permit associated with plant processes and a permit associated with stormwater discharges. When this is the case, an inspection would likely get credited to the more significant permit, which would be the one associated with plant processes. It is true that for us, a stormwater-only permit is less of a priority for inspection than other types of minor permits. Limited resources necessitate the prioritization of inspection types.

Page 6 of 26, **Recommendation II-1.** DEQ strives to conduct as many inspections as possible. To enable us to do a better job of that, not only in the water program but in other media as well, DEQ recently undertook efforts to re-engineer our agency and our processes. Surveillance staff housed in regional offices are being cross-trained, i.e., trained to do inspections for more than one medium. This will enable us to better allocate resources for inspections, special projects and routine ambient work.

Page 7 of 26, Paragraphs 1 and 2. Upon delegation of the NPDES program in late 1996, DEQ inherited a large backlog of permit applications (new and renewals) from EPA. Some of these applications are actually for facilities that were never built or were ultimately covered under other permit numbers. EPA has recently realized that database

clean up is imperative and continues to try to purge large numbers of facilities from the backlog list. Additionally, DEQ has developed a permit backlog reduction strategy that has been accepted by EPA. The strategy includes working with EPA to issue more categories of general permits and to utilize contract employees to help write some categories of permits.

In addition, an example of "one of Exxon's major permits" is given, with the permit expired since 1979 and never renewed. The permit in question is LA0005576, which covered Exxon's Maryland Tank Farm. That permit was intertwined with another of Exxon's permits, LA0005355, which covered the Plastics Plant and was appealed by the company upon its issuance by EPA a number of years ago. That appeal was finally resolved in CY2000 which opened the way for both permits to be addressed. However in 1999 Exxon began dismantling the Maryland Tank Farm, negating the need to reissue its permit. Also, even if the permit were to be reissued, it appears that it would be EPA's responsibility and not the state's to do so (see email documentation of conversation between Kilty Baskin, EPA representative, and Melvin Mitchell, DEQ employee).

Lastly, we need to address the 2nd-to-the-last sentence in Paragraph 2 which states "However, DEQ's untimely reissuance of permits may result in facilities operating under outdated or less stringent water quality standards." While this may happen occasionally, it would probably be the exception rather than the rule. When permits are administratively continued, that means the permittee must continue to operate under the same constraints of the original permit, even though it has expired. Therefore, an expired permit does not equate to "no restrictions". While water quality standards are reviewed every three years, specific numerical criteria changes don't occur that often. Additionally, most of the limits contained in major permits are technology-driven and not water quality-driven, i.e., limits are based on throughput or production at the site. When screened against water quality criteria, these limits indicate that water quality will be protected. Therefore, it is actually possible to have an expired, administratively continued permit that is more restrictive than a reissued permit if there has been a production increase at the facility during the past 5 years.

Page 8 of 26. **Minor Facilities Self-Monitoring Data Does Not Appear to Be Reviewed by DEQ.** This headline again gives an impression that is not correct. It is correct to say that for DMRs received in the main office, they are not immediately reviewed for compliance with permit limits. They are however logged into a DMR tracking database and then placed in the company file. Other required reports such as Noncompliance Reports are screened for possible enforcement action by technical staff prior to the documents being sent to the file room. However, DMRs are also submitted to the Regional Offices. Some of those offices review the submittals and use the DMRs to help prioritize inspections for the upcoming month. Additionally, after being placed in the facility file, DMRs are utilized by Regional staff as they prepare to conduct inspections and by permitting staff as they draft permit renewals. Upon reissuance of all major and minor permits, thorough compliance (inspection) and violation (DMR) reviews are conducted by the assigned permit writer. Instances of noncompliance are listed in the Fact Sheet and Statement of Basis for the draft permit and additional monitoring

requirements are added where appropriate. Additionally, the Enforcement Division is notified of this review and requested to initiate appropriate action.

In contrast to the auditor's review, our file review shows that the facilities reviewed were required to submit 699 (not 715) monitoring reports, but they did not submit 105 (not 153) of these, equating to 14% (not 21%).

In Paragraph 2 on this page, last sentence, the impression is given that for major facilities the computer does all the work. That is far from the truth. Technical staff are assigned to monitor each and every report submitted or event occurring at each and every major and significant minor for which we have enforcement authority. Extensive documentation is maintained and used in evaluating the facility's compliance status.

In Paragraph 4 on this page, the statement is made that "DEQ has entered some information on minor facilities into PCS, but PCS does not contain permit limits for all minor permits." While this is a correct statement, it should be noted that Louisiana enters detailed facility level, permit specific, inspection related, violation associated, enforcement and compliance data for more than 1,100 minor facilities. DEQ inputs facility/inspection related data and effluent violations data into PCS for more than 3,000 additional minor facilities.

Page 9 of 26, **Recommendations II-2 and II-3.** DEQ agrees that we can do a better job of reviewing DMRs for minor facilities. We have been working for quite some time on a national level to implement electronic data submittals for the NPDES program. That work fits nicely with our new data management system at DEQ (TEMPO). We believe that within 18 months, we will be able to accept all data electronically. In the meantime we will better utilize our existing tracking system to evaluate DMR non-submittals.

Page 9 of 26. **DEQ Does Not Accredite In-House Laboratories.** The impression is given in this section that the 1,000 in-house labs that are outside the Laboratory Accreditation Program are only at large facilities "that produce large amounts of waste in the state". While a number of large industrial facilities do maintain in-house laboratories, most of the 1,000 labs service entities like municipalities and minor dischargers.

Page 11 of 26. **DEQ Did Not Issue Enforcement Actions for 354 Violations in Calendar Years 1998 and 1999.** DEQ reviewed the list of facilities provided by the auditor and determined that we have taken enforcement actions on a number of those cited. These actions included citations for not submitting DMRs, effluent violations and not submitting noncompliance reports.

Page 13 of 26. **Over a Third of Inspection Discrepancies Did Not Result in Enforcement Action. Recommendation II-1.** Not all violations rise to the level to require formal enforcement action. DEQ's Enforcement Management System (EMS) document recommends that minor violations noted during inspections warrant a warning letter. However, the EMS is a guidance document that is used for LPDES enforcement personnel and Regional Offices in their exercise of enforcement discretion. This guide

should be used to select the most appropriate response to instances of noncompliance. When making determinations on the level of enforcement response, the Enforcement staff exercises professional judgment including consideration of many factors outlined in Chapter 10 of the EMS. In any particular case, these factors may lead to the application of an enforcement response different from that suggested in the guide. In addition, changes to the EMS have been drafted and are in the review process. One significant change is the addition of phone calls to the Enforcement Response Guide for minor violations. Additionally, inspectors often require corrective action at the time of inspection.

Page 14 of 26. **Recommendation II-2.** Facilities with continuing or recurring violations are often the subject of multiple, escalating enforcement actions. These facilities generally receive more attention from both surveillance and enforcement staff.

Page 14 of 26. **Some Enforcement Actions Issued Over a Year After Violation Occurred. Recommendation III-3.** We agree with the statement that DEQ should issue enforcement actions as close to when violations occur as possible. Part of our new data management system TEMPO will enable us to shorten the length of time between discovery of the violation and issuance of the action. However, it is not a bad thing that a violation might be corrected before an action is issued, and it is not wasted staff time. Formal documentation of violations, even if they have been corrected, is often desirable and/or required. Formal documentation lays the groundwork for future actions if they become necessary. The case cited does not tell the whole story. A file review of the example cited by the auditor revealed the following information:

- A multimedia inspection was performed at Crown Vantage Paper on December 2-9, 1997, with NEIC as the lead inspector. (NEIC was contracted by EPA for this inspection.) A copy of the water portion of the inspection was sent to DEQ enforcement on February 27, 1998, and an enforcement action was drafted. Due to the complexity of the inspection report and the reassignment of the case in late 1998, the issuance of the enforcement action was delayed. After the issuance and subsequent appeal by the company, discussions were held to review the violations cited and actions taken by the company in response to the inspection and order. Through negotiations, several paragraphs of the order were deleted and/or amended in an amended compliance order issued on May 31, 2000. The case was administratively closed and a letter stating that the violations were adequately addressed was sent to Crown Vantage on August 25, 2000. The enforcement action was amended primarily due to the inadequacies of the inspection report.

Pages 15-16 of 26. **DEQ Has Not Collected 40% of Penalties Assessed in 1998 and 1999.** DEQ assessed 28 penalties totaling \$831,382.87 in calendar year 1998 and 5 penalties totaling \$114,764.00 in calendar year 1999. To date, DEQ has collected \$389,820.57 in full penalty payments and \$40,045.00 in settlement payments for 1998, and \$68,247.00 in full penalty payments and \$35,000 in settlement payments for 1999. DEQ assessed these penalties in accordance with Louisiana Revised Statutes 30:2025.E. of the Louisiana Environmental Quality Act. This statute states that the nine factors

listed in La. R.S. 30:2025.E. shall be considered in determining whether a civil penalty is to be assessed and in determining the amount of the penalty or the amount agreed upon in compromise. The penalty regulations outlined in chapter seven of the Environmental Regulatory Code were promulgated in April 1999. At the time that all but one of these penalties was assessed, the penalty regulations were not in effect.

The reason that seven of these penalties are uncollected is due to the ongoing appeal process. This accounts for \$257,171.73 of the assessments for 1998. In five cases, DEQ entered into settlement agreements. The settlement amounts are listed above. In four cases where the companies did not respond to the penalty assessments, DEQ has made the penalties executory which means that the payment of the penalties can be enforced through legal mechanisms for seizure and sale of assets. This accounts for \$64,113 of the assessments for 1998 and 1999 combined.

Also, it must be noted that "penalty assessed" does not equate to "money owed to the state". The law allows for an appeal process, during which time that penalty may be increased, reduced or totally vacated by the administrative law judge or the court.

Pages 16-18 of 26. **DEQ's Beneficial Environmental Projects Need Criteria. Recommendation III-4.** The examples cited in this section were finalized prior to the enactment of the BEP rule. However, they were all public noticed and concurred on by the Attorney General's Office. Verification of completion of projects was through verbal or written contact either with the company or with a third-party recipient.

DEQ's BEP rule is not inconsistent with EPA's guidance or policy on SEPs. There are many factors that go into the consideration of whether or not to enter into a settlement that contains a BEP. And having projects recommended by "just about anyone" is not a bad thing. DEQ, EPA, citizens, other agencies, industry, etc., can suggest BEPs. In fact, EPA is developing a web site to solicit ideas for inclusion into settlements. We expect to use that web site when it becomes available. While we don't agree that we need additional requirements for BEPs, we do agree that we could incorporate a more formal process for tracking or documenting final completion of the requirements. That has already been accomplished by changing the boilerplate language in our settlement document forms.

Page 18 of 26. **DEQ Often Voids or Amends Enforcement Actions; Some are Due to Its Untimely Actions.** As indicated in our initial response to the draft audit, we do not feel that these two cases support the headline. As explained, the actions that were voided during the 1998-1999 time frame were the result of a database cleanup effort. A change in the way the enforcement tracking number is assigned has now essentially eliminated the need to void the tracking number if mistakes are made.

The example cited for Allied Signal resulted from EPA's not issuing the permit, not DEQ's untimely issuance of the permit. The example of Crown Vantage is discussed extensively in a previous section of this response. As stated there, most of those

amendments were the result of problems with the inspection report and not due to the timing of the issuance of the action.

Pages 19-26 of 26. **Objective IV: Are Louisiana's Water Quality Programs Fragmented?** Two of the themes throughout this section are the lack of formal coordination and communication, and fragmentation/inefficiency. We thank the auditors for removing some of the language in the initial draft report upon being presented examples by DEQ of specific areas of cooperation and communication. We feel that these areas should be pointed out in this response for the benefit of the reader:

- DHH is copied on all STP permit actions (cover sheet and fact sheet), all industrial permits that have a STP discharge (cover sheet), and all permits for facilities discharging into a drinking water source (cover sheet).
- DHH is copied on all STP enforcement actions.
- DEQ and DOTD have a Memorandum of Understanding regarding the use of water well data. We routinely report any discrepancies we find in the field.
- DEQ and DNR work together in the UIC program and in the oilfield.
- DEQ and DAF work extensively together in the Nonpoint Source Program and recently on the atrazine sampling project.
- An avenue of communication, particularly from a ground water perspective is the Ground Water Advisory Group that meets quarterly at DEQ. Participants are DHH, DNR, DAF, DOTD, and CAGWCC.

One area specifically pointed out in the audit report is the approval process for construction of sewage treatment plants. We agree that it is a possibility for someone to get STP plans approved by DHH and then not get approval from DEQ to discharge from that plant. But this is a failing on the part of the applicant and not on the part of the agencies. The applicant should find out what his discharge limits are going to be prior to designing the plant and submitting those plans to DHH for approval. If the applicant would to this, there would be no delay in the process.

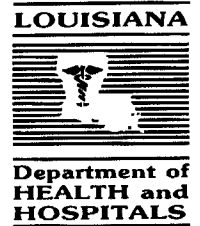
APPENDIX K-2

Department of Health and Hospitals, Office of Public Health's Response

This letter was written as a response to a draft copy of our audit report. This final audit report contains revisions made as a result of the exit conference and this response letter. Therefore, some statements in the department's response letter may have already been addressed in this final audit report. In addition, each department only received a copy of its portion of this audit. Therefore, page numbers in the response may not correspond with actual page numbers in this report.



STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS



M. J. "Mike" Foster, Jr.
GOVERNOR

December 22, 2000

David W. Hood
SECRETARY

Dr. Daniel G. Kyle
Legislative Auditor
State of Louisiana
1600 N. Third Street
P.O. Box 94397
Baton Rouge, LA 70804-9397

RE: Response to Draft Legislative Auditor's Report
Louisiana Safe Drinking Water Program
Department of Health and Hospitals

RECEIVED
LEGISLATIVE AUDITOR
2000 DEC 22 PM 2:53

Dear Dr. Kyle:

The enclosed report has been prepared to respond to comments and findings in the draft Legislative Auditor's Report: *Water Quality in Louisiana*. We have reviewed the portions of your report, which pertain to the State's Safe Drinking Water Program. Per your instructions, the attached report responds directly to each recommendation in that portion of your report. We understand that portions of our response to those recommendations may be included in the final draft of *Water Quality in Louisiana*. We further understand that our entire response will be included as an appendix to your report.

I am pleased to report we have identified and already addressed most of the recommendations over the past twelve months. Please review this response and contact Ms. Madeline McAndrew at (225) 342- 8093 or myself with your comments and questions. We look forward to seeing the final draft of *Water Quality in Louisiana* soon.

Sincerely,

David W. Hood
Secretary

cc: Madeline McAndrew, Assistant Secretary, OPH
Bobby Savoie, Center for Environmental Health Services
Renee Roberie, Office of the Legislative Auditor

RESPONSE TO DRAFT LEGISLATIVE AUDITOR'S REPORT
WATER QUALITY IN LOUISIANA
LOUISIANA SAFE DRINKING WATER PROGRAM
DEPARTMENT OF HEALTH AND HOSPITALS
OFFICE OF PUBLIC HEALTH
CENTER FOR ENVIRONMENTAL HEALTH SERVICES
ENGINEERING SERVICES

This report addresses the section of *Water Quality in Louisiana* that pertains to the State's Safe Drinking Water Program – Objectives I-IV (Recommendations II-5, II-6, II-7, II-8, II-9, II-10, II-11, II-12, II-13, III-5, III-6, III-7, III-8, III-9 and VI) and the ancillary small community sewage program. These programs are managed within the Center for Environmental Services of the Office of Public Health, Department of Health and Hospitals.

Comment 1: on first page of **Background** Section: Replace box “How Safe is Louisiana Water?” which addresses stream quality with information on Drinking Water to (Reference: www.epa.gov/safewater/wot/wot.html).

Comment 2: on second page of **Background** Section: Clarify which Louisiana water uses are “not necessarily unsafe”. Lack of clarification could mislead Louisiana residents to believe that their drinking water is unsafe, when in fact; many ground water sources are so pure that no treatment is required to produce safe drinking water. Other sources that contain contaminants are treated to remove those contaminants prior to distribution to the public. Add that EPA has commended the Louisiana Department of Health and Hospitals Safe Drinking Water Program for its high percentage of compliance with drinking water monitoring requirements.

Comment 3: on second page of **Background** Section: Clarify that Primacy designates responsibility to a regulatory program to a specific state agency for administration of that program.

Comment 4: on second page of **Background** Section: In the box for *OPH's Mission*, add certification of seafood and oysters to the sentence “...specialties of water, milk, and dairy products.”

Comment 5: on third page of **Background** Section: Define the scope of the Legislative Audit. Please note that OPH has been re-organized from six divisions into four centers. The Safe Drinking Water Program and the Drinking Water Loan Fund Program are located in the Center for Environmental Health Services. The laboratory program is located in the Center for Policy and Health Information and Regional office staffing remain in the Center for Community Health. (See attached organizational chart)

Comment 6: on third page of **Background** Section: Change “and *annual* samples for chemical analysis...” to “and periodic samples for chemical analysis.” The Office of

Public Health collects samples for chemical analysis on quarterly, semi-annual and annual bases, depending on the size of the system and the type of program.

Comment 7: on fourth page of **Background** Section under Enforcement Activities: Correct, "OPH 481" to "OPH issued 481 notices of violations..."

Comment 8: under **Objective II**: Correct "Division of Environmental Health" to "Center of Environmental Health Services, Engineering Services."

Comment 9: on eighth page under Objective II: The statement "... it is questionable if the Central Office would have the authority to require that District and Regional offices follow it..." is an unfair statement. It is speculative and simply not accurate. The Office of Public Health Central Office staff does have the authority to implement policy in the Regional/District offices. Please refer to **Comment 10** for further explanation.

Comment 10: under **Objective II, Recommendation II-5**: The Office of Public Health will continue the current organizational structure of Regional Administrators and Center Directors. This structure was adopted on November 1, 2000 and was established subsequent to research and evaluation of the organizational structure of comparable agencies in all fifty states, as well as the recommendations from the SECURE Report and interviews and recommendations from the Office of Public Health staff. We believe that this new structure is the most effective and efficient structure for the Office of Public Health.

Regional Administrators will continue functional administration of Regional staff. The Center Directors will provide policy direction to Regional Staff with cooperation of Assistant Secretary and Regional Administrators, including training, inspection and monitoring requirements. The Administration has made Environmental Health a top priority, since it is a core function of the Office of Public Health.

On page 7 under Objective II, the Administration had previously recognized the need for standardization of computer equipment and software packages. In March 2000, an Office of Public Health Automation Steering Committee was formed to evaluate computer needs across the regions and provide standardized equipment at each office. The work of installation of network connections in each office is nearly finished and is scheduled for completion in January 2001.

Comment 11: under **Objective II, Recommendation II-6**: Since Spring 2000, the Regional office Engineering Services staff has been meeting regularly with Central Office staff in quarterly meetings to share and standardize procedures. Mandated cooperation between the Regional Offices and the Center for Environmental Health Services has ensured Regional staff attendance at these meetings.

Comment 12: under **Objective II, Recommendation II-7**: With the expansion of the Safe Drinking Water Program mandated by the 1996 Safe Drinking water Act Amendments and the corresponding increase in staff in Engineering Services, the

Standard Operating Procedures (SOP) Manual will be completely overhauled. Many new policies will continue to be implemented by memoranda, as flexibility for expanding programs is required. Mandated cooperation between the Regional Offices and the Center for Environmental Health Services will ensure implementation of new policies and SOPs.

Comment 13: under **Objective II, Recommendation II-8:** Engineering Services is in the process of switching from the former Safe Drinking Water Program database to a federal database, called Safe Drinking Water Information System (SDWIS). This transition began in November 1999 and is scheduled for completion by January 2001. The process of migrating data from one major database to another has been ongoing for more than a year. Implementation of this new program database is expected to alleviate many of the previous inefficiencies. Instead of uploading data on a quarterly basis, both the Central Office and the Public Water Systems will have access to the data in real time.

During the last six months, the Office of Public Health conducted research and developed established caseload requirements for all staff including but not limited to nursing, clerical, and sanitarians to ensure consistency and standardization statewide. These standardization levels were utilized in the Office's downsizing plan and were effective December 11, 2000. Subsequently, clerical staff caseloads have been reallocated to core services, resulting in additional staff assigned to Environmental Health Services. The Office of Public Health tracks the hourly time of its staff through a variable Time and Attendance reporting system, which requires each staff hour to be charged to the activity performed. Since the Drinking Water Program staff is being increased due to a corresponding increase in the Federal program, sufficient clerical staff to meet the input requirements for the database should soon be available. Effective July 1 2000 control of funding for new equipment under the Safe Drinking Water Program has been reallocated to Central Office to ensure uniform application to Regional offices.

Comment 14: under **Objective II, Recommendation II-9:** Correct the word "**corrected**" to "**collected**". Engineering Services has not yet had the time to review, verify and evaluate the statistical data. Please note that the percentages quoted are a *sampling of selected data* and do not represent the entire State's monitoring program. Due to staff shortages and a need to eliminate duplication of effort, we have relied on the annual federal Environmental Protection Agency (EPA) audits of our program for data verification. It is the responsibility of the EPA to provide oversight and monitoring of all state's safe drinking water programs. These annual EPA audits have not reported any major deficiencies in sample collection, other than a chronic staff shortage. Regional Engineering Services Sanitarians are responsible for correctly collecting all chemical samples. Any errors found during the verification process will result in immediate corrective action being taken by Engineering Services. We will implement the following actions as a result of these findings (1) enhance staff training and (2) perform internal audits on an unscheduled basis.

Comment 15: under **Objective II, Recommendation II-10:** Regional Engineering Services staff are responsible for issuing notices of monitoring violations to public water

systems that do not collect the correct number of samples. Due to staff shortages and a need to eliminate duplication of effort, we have relied on the annual federal Environmental Protection Agency (EPA) audits of our program for deficiency verification. It is the responsibility of the EPA to provide oversight and monitoring of all state's safe drinking water programs. These annual EPA audits have not cited any major deficiencies in monitoring, other than a chronic staff shortage.

Comment 16: under **Objective II, Recommendation II-11:** Regional Engineering Services staff are responsible for training Parish Sanitarians in the proper collection of microbiological samples and will continue to do so. The Office of Public Health implemented in 2000 a standardized formal training program for all sanitarians. This program includes sample collection training.

Comment 17: under **Objective II, Recommendation II-12:**

We concur with this recommendation that private laboratories are required to use the same forms that OPH State labs use, and we have already initiated this procedure. These forms were designed collaboratively between the Public Health Division of Laboratories and the Center for Environmental Health Services several years ago to capture all the required data needed for analytical, compliance and regulatory purposes. The authority to do this for microbiological drinking water samples can be found in *The Manual for Certification of Laboratories Analyzing Drinking Water*, EPA 815-B-97-001, March 1997, Section 6.5 in which the required information is cited. It is the same data requested on Lab Form 8. The authority to do this for chemical drinking water samples can be found in *NELAC, Constitution, By-Laws and Standards*, EPA 600/R-99/068, July 1999, Section 5.11.2 in which the required information is cited. It is the same data requested on Lab Form 49.

Comment 18: under **Objective II, page 11:** The Safe Drinking Water Program Fee was intended to increase program personnel, training and equipment to meet the requirements of the Sanitary Code and the Federal Safe Drinking Water Program. This fee was not used to supplant other Environmental Health programs.

State law requires that “the office of public health of the Department of Health and Hospitals shall perform all inspections, tests, or procedures on public water supplies as may be authorized by the administrator of the Environmental Protection Agency under the federal Safe Drinking Water Act, 42 U.S.C. 300f et seq. at no cost to any municipality, parish, governing authority, or any public or privately owned water system except as provided in R.S. 40:31.33.” It should be noted that this law does not state that the Office of Public Health will collect the samples at no charge to the systems. Please correct this error.

The Safe Drinking Water Fee of \$3.20 per year was not intended to be a cost burden to Public Water Systems, but is directly collected from the users (per connection). To offset costs of collection of the fee, public water systems were allocated to keep 10% (\$0.32 open connection) of collected fees. The cost of the Safe Drinking Water Program is approximately \$5.8 million annually. It is anticipated Office of Public Health will

generate approximately \$ \$3.3 million annually. The program cost does not include the costs for Parish Sanitarians to collect the bacteriological samples. This is an additional \$800,000 annually.

Due to the fact that other states charge both users fees and charge the systems for laboratory costs for sample analysis, Louisiana should follow the practice of other states and repeal the law requiring the Office of Public Health to perform tests for free.

Comment 19: under **Objective II, page 12:** The Engineering Services staff has had limited access to the old computer database. The new Safe Drinking Water Information System (SDWIS) database has been under construction since November 1999 and is scheduled to go online in January 2001. This new database should correct many of the previous problems. The SDWIS database will be accessible by Central Office and the Public Water Systems in real time. Errors in the database will be more readily identified and corrected.

The Administration had previously recognized the need for addition of computer equipment and software packages. In March 2000, an Office of Public Health Automation Steering Committee was formed to evaluate computer needs across the regions and provide standardized equipment at each office. The work of purchasing new computers for the Regional staff at each location is scheduled for completion in January 2001.

Comment 20: under **Objective II, Recommendation II-13:** In light of EPA's recent expansion of the requirements for completion of sanitary surveys, Engineering Services will revise the sanitary survey goals to meet the Federal schedule for completion of sanitary surveys, since Engineering Services has been successful in meeting the Federal sanitary survey goals.

Please note that "private" laboratories should be changed to "non-state-owned" laboratories. All laboratories allowed to analyze drinking water compliance samples must be State certified.

Comment 21: under **Objective III, Recommendation III-5:** The Office of Public Health, Center for Environmental Health, Engineering Services has not yet had the time to review, verify and evaluate the statistical data presented in the Legislative Auditor's report for MCL violations. Please note that the percentages quoted apply to a *sampling of selected data* and do not represent the entire State's program. Due to staff shortages and a need to eliminate duplication of effort, we have relied on the annual federal Environmental Protection Agency (EPA) audits of our program for verification that maximum contaminant level (MCL) requirements are met. It is the responsibility of the EPA to provide oversight and monitoring of all state's safe drinking water programs. These audits have not reported any major deficiencies in MCL violation reporting. Regional Engineering Services staff is responsible for correctly identifying and initiating Public Notifications for MCL violations. This task has the highest priority within Engineering Services. Any errors found during the verification process will result in

immediate corrective action being taken by Engineering Services. We plan to implement a system of random auditing of Regional files for compliance with MCL violation identification.

Engineering Services disagrees with the statement that all MCL violations receive an enforcement action. Most MCL violations are met with prompt action by the water system to perform Public Notice and correct the violation with flushing and supplemental disinfection as necessary. In these cases an enforcement action is unnecessary. Enforcement actions occur upon failure to comply with prompt Public Notice and correction of violations. Our mission is not to punish water systems, but to assist with meeting the requirements of the Sanitary Code and in protecting Public Health.

Comment 22: under **Objective III, Recommendation III-6:** The Engineering Services' objective is to work with Public Water Systems to develop finances and managerial ability to bring the systems into compliance with Safe Drinking Water requirements. Since the public cannot be without water supply for fire protection purposes as well as drinking water, it is not the Engineering Services enforcement strategy to shut down non-complying systems, but to work with systems to help them achieve compliance. The Regional staff interacts personally with a Public Water System in violation to convince the system to issue a system-initiated Public Notice. Paperwork verification of the public notice may be absent in some files. EPA does not require that States maintain records of Public Notice issuance under 40 CFR 142.12 **Records Kept By States.** However, Engineering Services will issue a policy for the Regions to keep verification records that Public Notices were issued by water systems. We will also implement a uniform documentation procedure within the Standard Operating Procedures Manual.

Comment 23: under **Objective III, Recommendation III-7:** Engineering Services issues Administrative Orders and Compliance Orders for non-compliant systems. Any violation, which directly impacts public health, is addressed as priorities. Non-emergency non-compliances that do not impact public health (for example: mowing the grass around a wellhead) may not be immediately addressed. The reduced sanitary survey schedule will free personnel to perform more follow-up and documentation of corrections to significant deficiencies.

It is important to understand the District Engineers do not have the discretion to request or not request an Administrative Order (AO), unless the violations do not automatically trigger the requirement for an AO under the Sanitary Code. Certain physical violations at a water plant may not require an AO be issued. However, the District Engineers can request that an AO be issued if he determines that such violations are of a sufficiently serious nature.

Comment 24: under **Objective III, Recommendation III-8:** The reduced sanitary survey schedule will free personnel to perform more follow-up inspections to ensure correction of significant deficiencies and follow-ups inspections are documented.

Comment 25: under **Objective III, Recommendation III-9:** Acquisition of additional computers and Internet access, because of the SDWP fee implementation, is providing the funds needed for access by our staff. After Engineering Services switches from the former SDWP database to the federal SDWIS database in January 2001, the Enforcement Unit will have access to the data. Implementation of this new program database is expected to alleviate many of the previous inefficiencies.

Comment 26: under **Objective IV:** In December, 1998 the Office of Public Health Center for Environment Health was moved from New Orleans to Baton Rouge. This move has encouraged collaboration and coordination between the agencies to a much greater degree than ever before. The Office of Public Health also maintains agreements with other state agencies and works with them in cooperating on drinking water issues. The Office has developed Memoranda of Understanding with LDEQ and DOTD to share database information on wells. The LDEQ and the Safe Drinking Water Loan Fund Program share responsibility for managing the loan fund. DOTD, LDEQ, and OPH meet regularly on groundwater issues. The LDEQ and OPH work closely together on the wellhead protection Program and the Source Water Assessment Program. They also cooperate on source water contamination issues, such as Mississippi River spills and drinking water well contamination. Other regularly scheduled interagency meetings include the Water Well Drillers Licensing Committee and the DAF interagency pesticide group.

Comment 27: under **Objective III, Recommendation IV:**
Laboratory Accreditation Programs May be Duplicative

We agree with the recommendation that one laboratory accreditation program in Louisiana is sufficient both functionally and financially. We believe that based on our historical record as an accreditation program, fiscal responsibility in managing the program, technical competence, training and diversity of experience that the OPH Division of Laboratories should retain that function.

The auditor states in the beginning of paragraph 2 on page 23 that both DEQ and OPH NELAP programs are in some stage of becoming accredited by the same national accrediting entity, the National Environmental Laboratory Accreditation Program (NELAP). This information is not accurate. Currently, the OPH Laboratories have 1 of only 11 nationally **currently approved** NELAP certification programs while the DEQ program is still in the process of becoming accredited. OPH laboratory inspectors have been routinely participating in regularly scheduled teleconferences with other NELAP accrediting authorities and with EPA to precisely formulate the standardized accreditation procedures and regulations for lab accreditation mentioned by the Auditor in paragraph two. The teleconferences have also allowed us to confer with other NELAP approved states regarding reciprocal agreements.

OPH has been certified by EPA and has operated a drinking water laboratory accreditation program authorized by EPA for both microbiological and chemical laboratories since the inception of the Safe Drinking Water Act. OPH has significant experience in accreditation as its Inspectors also accredit-state and private labs for milk

and dairy, shellfish, and shellfish water analyses. In order to carry out these functions, OPH inspectors have received national certification training and have been evaluated as competent advisors and approved to perform on-site inspections. DEQ inspectors have not received such training or approval. Importantly, we have provided these services with a smaller staff and budget than DEQ. Placing the DEQ wastewater accreditation program in OPH would be fiscally sound, as it would provide needed resources to OPH's established and more comprehensive accreditation plan.

We do not concur with the statement by a plant manager that the DEQ wastewater laboratory requirements are more stringent than our OPH drinking water laboratory requirements.

OPH operates first class microbiological and chemical analytical water laboratories. DEQ laboratories, however, do not perform Microbial analysis. In addition, OPH is the only Chemistry laboratory in the State to analyze the full spectrum of chemical and radiological parameters. In order to provide valuable and high-quality accreditation, an inspector must be attached to a fully competent laboratory. We believe this is available in the Office of Public Health.

Comment 28: under Objective IV: It is uncertain as to why sewer treatment is part of this audit. However, it should be noted that LDEQ and OPH have different roles. OPH Engineering Services reviews plans for community and small system sewage plants and issues letters of comments and approvals to construct. LDEQ permits the actual discharge after construction. LDEQ must fit discharge permits into the Total Maximum Daily Load allowances for water bodies. OPH's role is to ensure public health protection from improperly treated sewage and protection of drinking water conveyances. The Office of Public Health will work with LDEQ to form a task force to eliminate inefficiencies and ensure smooth cooperation in permitting these systems.

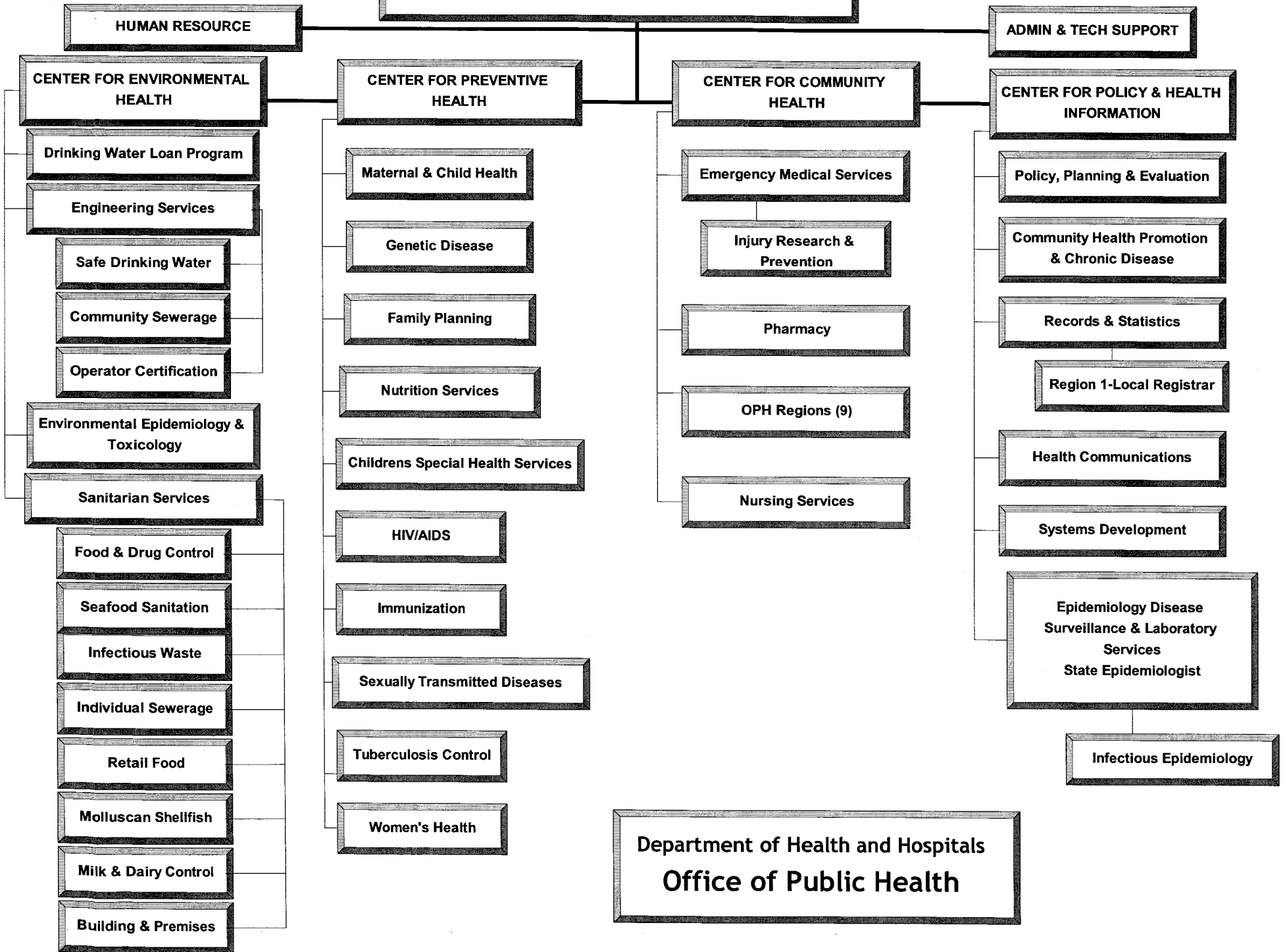
There is a Governor's Sewer Task Force that was formed approximately two years ago whose purpose is to address sewer related issues. Members include LDEQ and DHH/OPH, manufacturers of sewage units, Lake Pontchartrain Basis Foundation, consumers and others. This task force has been very productive in identifying major issues and recommending rules and regulations to ensure clean environments. Through this task force issues relative to collaboration and coordination between departments, consumers, etc are identified and assist the Departments in developing ways we can implement procedures and protocols to the benefit of the citizenry at large.

Comment 29: under Objective IV, Recommendation VI: The Office of Public Health does not agree with this statement. Engineering Services and the Drinking Water Loan Fund are both in the same program: the Center for Environmental Health Services. Both of these program areas are intertwined with shared personnel, funding and supervision. In addition, OPH Engineering Services interacts closely with the LDEQ for source water protection assessment and program development, well delineation and wellhead protection. Engineering Services is in the process of developing Memoranda of Understanding (MOUs) with both LDEQ and DOTD for sharing in well databases.

Please note that Engineering Services does not inspect projects after construction. Permits are issued based on design plans for construction. Permits to operate sewage discharge systems are issued by LDEQ. Water plant operation is closely monitored by Engineering Services through treatment, record keeping, reporting and monitoring compliance requirements.

Comment 30: under **Objective IV, Matters for Legislative Consideration:** Neither of these two issues should require legislation, but they should occur in the course of good business practice. LDEQ and OPH will form a task force to eliminate inefficiencies and ensure smooth cooperation in permitting sewage systems. DEQ and OPH have already been working on a method to share database information. Most of the violation and compliance information from both agencies will be uploaded into a publicly accessible database systems under federally sponsored programs allowing the sharing of information not only internally within state government, but externally as well.

ASSISTANT SECRETARY



**Department of Health and Hospitals
Office of Public Health**

APPENDIX K-3

Department of Natural Resources, Office of Conservation's Response

This letter was written as a response to a draft copy of our audit report. This final audit report contains revisions made as a result of the exit conference and this response letter. Therefore, some statements in the department's response letter may have already been addressed in this final audit report. In addition, each department only received a copy of its portion of this audit. Therefore, page numbers in the response may not correspond with actual page numbers in this report.



M.J."MIKE" FOSTER, JR.
GOVERNOR

**DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION**

JACK C. CALDWELL
SECRETARY

PHILIP N. ASPRODITES
COMMISSIONER OF CONSERVATION

December 21, 2000

Dr. Daniel G. Kyle
Legislative Auditor
Office of Legislative Auditor
State of Louisiana
P. O. Box 94397
Baton Rouge, Louisiana 70804-9397

Re: Response to Legislative Auditor's Report
Underground Injection Control Program
Department of Natural Resources
Office of Conservation

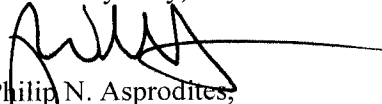
Dear Dr. Kyle:

The Office of Conservation appreciates the opportunity to comment on the soon to be released Legislative Auditor's report on Louisiana's water protection (regulatory) programs. We were granted the opportunity to comment on the Underground Injection Control (UIC) program.

Although we agree with much of the report, the report does contain information that may not accurately portray the facts or the effectiveness of the Louisiana UIC program. In light of the extremely technical nature of the UIC program, it appears that many of your findings are based on a misunderstanding of the regulatory functions of this program. Therefore, the comments included herewith will provide additional information in response to various portions of the auditor's report. I understand that our comments will be included as an appendix to the final report and that our response to the recommendations will be included right after each recommendation.

Again, thank you for the opportunity to comment on this very important document. Please contact Mr. Carroll Wascom or Mr. Joe Ball at 342-5515 if you have any questions.

Yours very truly,



Philip N. Asprodites,
Commissioner of Conservation

PNA:CDW

cc: Secretary Jack C. Caldwell

Attachment

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**Comments of the Louisiana Department of Natural Resources
Office of Conservation, Injection & Mining Division
on the Louisiana Legislative Auditor's DRAFT Report
Dated December 15, 2000**

Submitted December 21, 2000

Introduction — Water Quality In Louisiana

A section of the audit report discusses the Toxic Release Inventory (TRI) report. The majority of the discussion is on surface waters which is unrelated to the Louisiana Underground Injection Control Program. For purposes of clarity, the sentence referring to Louisiana's ranking in underground injection wells should be moved from its current position in the middle of the paragraph to the end of the paragraph.

The paragraph immediately below Exhibit 2 in the audit report states that Class I wells pose the greatest risk to ground water. However, no explanation is presented on how this decision was reached. Since receiving primacy of the Louisiana Underground Injection Control program from the U.S. Environmental Protection Agency in 1982, no Class I well has ever endangered an underground source of drinking water. The statement on the risk of Class I wells needs clarification to reflect the excellent record of Class I wells in the State of Louisiana.

The section under 'Monitoring Activities' below Exhibit 2 uses the term 'Injection Area'. To be consistent with terminology used in the remainder of the report, the term 'Injection Area' should be changed to 'Injection Zone'.

Objective II: Does Louisiana Have an Effective Monitoring Program for Drinking Water and Surface Water?

Finding—DNR Not Inspecting Injection Wells According to Policies

A correction is needed to Exhibit 6 by amending the number of total Class I noncommercial wells for 1999. The correct value is 38. The erroneous value of 41 (supplied by this office) was the total number of Class I commercial and noncommercial wells combined for 1999.

The Note explaining an entry in Exhibit 6 should read, “. . .DNR does not have a written policy on the frequency. . . .”

The discussion on wells not being tested at a required minimum test pressure of 500 pounds per square inch (psi) applies to Class I wells only. Regulations for Class I wells do not specify a minimum test pressure. The 500 psi minimum test pressure is an operating policy of the Office of Conservation, Injection & Mining Division (OC/IMD) and is printed on the well test inspection form (Form UIC-8). The OC/IMD acknowledges that in a few instances, Class I wells were field tested

at pressures less than 500 psi. Since these wells are monitored 24 hours a day and have continuous monitoring records which are reviewed by OC/IMD field inspectors, any past instances of field testing the wells at less than 500 psi should not infer that OC/IMD is not ensuring the wells' mechanical integrity. This oversight was corrected during Louisiana fiscal year 2000. All Class I wells are now field tested at a minimum pressure of 500 psi.

The audit report discusses the frequency of inspections for Class II commercial and noncommercial wells. The regulations of this office do not differentiate between Class II commercial or Class II noncommercial wells when mandating the frequency of testing for such wells by Office of Conservation personnel. By regulation, mechanical integrity testing for all Class II wells must be done at least once every five years. This is found in the office's regulations at (LAC 43:XIX.419.C.5) and on page 48 of our program description, both approved by the U.S. Environmental Protection Agency (USEPA). In pertinent part, the cited references read, "Each disposal and enhanced recovery well shall demonstrate mechanical integrity at least once every five years. . . ." Note that no distinction is made between a commercial or a noncommercial well.

The OC/IMD attempts to perform a combined mechanical integrity test and inspect each Class II commercial well twice a year. This action is not only consistent with, but exceeds our regulatory requirements and our program commitment to the USEPA.

In 1994, a review team sponsored by the Interstate Oil and Gas Compact Commission (IOGCC) and the USEPA performed an audit of Louisiana's oil and gas waste management program. Included in its final report as Finding IX.2., Pages 36 and 37, the audit team noted, "OC Inspectors visit all commercial facilities at least twice a year, and many are inspected four or more times a year. . . ." A copy of the IOGCC July 1994 report was earlier delivered to you.

Based on the above, OC/IMD exceeds its our regulatory requirement and program commitment for frequency of inspections of Class II commercial injection wells.

The audit team reviewed the frequency of inspections of Class I and Class II wells. However, the inference made in the audit report is misleading. Although the discussion refers to the sample population of predominately Class I wells reviewed for FY 1998 and 1999, it infers that DNR was neglectful in not performing 24 percent of the required inspections for its entire well inventory. This is not true. The tables below supplies figures for Class I and Class II well inspections for Louisiana fiscal years 1998 and 1999:

Class I Well Inspections Performed in Respective Years					
1998			1999		
Individual Wells Inspected	Total Well Inspections	Well Inventory	Individual Wells Inspected	Total Well Inspections	Well Inventory
40	56	43	41	65	41

Class II Well Inspections Performed in Respective Years					
1998			1999		
Individual Wells Inspected	Total Well Inspections	Well Inventory	Individual Wells Inspected	Total Well Inspections	Well Inventory
830	1044	3485	1015	1661	3502

State and federal regulations for Class II wells (commercial and noncommercial) mandate inspecting at least 20 percent of the well inventory each year. The Class II well inventory for years 1998 and 1999 were 3,485 and 3502 respectively; therefore, DNR was required to inspect approximately 700 individual Class II wells for each year. The above chart shows actual field inspections exceed the required 20 percent. DNR is required to inspect 100 percent of its Class I well inventory yearly. The above chart shows that 93 percent and 100 percent of the Class I well inventory were inspected in years 1998 and 1999 respectively.

The same audit paragraph reads, “In addition, DNR is not adequately ensuring that injection wells are properly maintained.” The deficiency in doing the required frequency of annual well inspections in the auditor’s sample population does not mean DNR is not ensuring proper maintenance of such wells. When Class I well field inspections are performed, DNR inspectors review all well operating and monitoring records since the last field inspection. The continuous monitoring records are more indicative of the wells ‘real world’ performance and mechanical integrity.

Due to staff shortages during the audited years, performing the required frequency of inspections for some classes of wells were below standards for FY 1998 and 1999. However, with the filling of vacant field positions during the 1st and 2nd quarters FY 2000, DNR has begun and is currently performing 100 percent of all required well tests and inspections.

Recommendation II-14: OC/IMD agrees with this recommendation

Recommendation II-15: OC/IMD believes this recommendation should instead suggest the implementation of a ‘standard operating procedures’ or ‘policies and procedures’ manual that outlines the number and frequency of inspections and well integrity tests to be performed by state inspectors. EPA requires all Class II wells to be inspected/tested at least once every 5 years. OC/IMD exceeds this requirement with its currently unwritten policy to inspect/test Class II commercial wells at least twice each year.

Finding—Some Monitoring Reports Not Submitted for Class II Wells

DNR acknowledges that at the time of the audit we were two years behind in reviewing Form UIC-10 monitoring reports. This backlog was created due in part to manpower limitations and updating

of the Form UIC-10 to a computer generated form in 1989. Implementation of this new system resulted in up-front delays in the issuance of the computer generated Form UIC-10 for each injection well. An extension to the filing return date for the Form UIC-10 was then needed, which in turn caused the delay in the start of the audit procedure. The majority of the delinquencies and compliance violations were not found until all Forms UIC-10 submitted were audited and entered into the computer database. Some Form UIC-10 delinquencies and compliance violations were found during FY's 1998 and 1999 as the result of DNR's internal compliance and file reviews.

Manpower limitations have been alleviated by the temporary reassignment of personnel to aid in the auditing of these forms. The 1998 UIC-10 audit was completed in June 2000 and currently one-third of 1999 UIC-10 audit has been completed. The implementation of the new Oracle database computer system in May 1999 and subsequent updates of the system has shortened the delays in the issuance of the computer generated forms. A streamlined audit procedure and another recent update of the Oracle computer system will allow quicker determination of delinquent operators and compliance violations. DNR is committed to a more timely audit of the Form UIC-10 and is taking needed steps to correct past deficiencies.

Recommendation II-16: Electronic submission of reports may not improve a backlog of report review if manpower is not available to review the submitted information.

Finding—Monitoring Reports for Commercial Class II Wells Not Reviewed Completely and Some Contain False Information

The first paragraph discusses the monthly reports (Form UIC-21) submitted for each Class II commercial well. DNR agrees that before 1999, primarily due to staff shortages, review of UIC-21 monthly reports occurred as necessary, e.g., to supplement and/or support injection well test results, inspection reports and enforcement actions. However, with additional staff, DNR now reviews each report focusing on timely submission, report completeness and compliance with the minimum annulus pressure requirement of 100 psi. In-depth review of UIC-21 injection rate and pressure data by DNR staff was previously and is currently conducted on a case by case basis, usually associated with specific well test results.

DNR shall immediately revise its procedures of reviewing all Class II commercial well monthly reports. The reports shall be reviewed for timely submission, completeness, and all reporting parameters required by the report. DNR field inspectors shall review all daily monitoring records when performing onsite well inspections to ensure operator compliance with permitted conditions.

Recommendation II-17: OC/IMD has implemented the review of injection pressure on monthly Class II commercial injection well reports.

Recommendation II-18: OC/IMD will work with legal counsel to determine the most appropriate wording to include on monitor report forms to implement this recommendation.

Recommendation II-19: OC/IMD will implement actions to compare monthly commercial Class II well monitor reports with annual reports as recommended.

Finding—Most Current Maximum Surface Injection Pressure Difficult To Determine

Prior to 1995, injection/disposal wells were assigned a MASIP based on the proposed method of constructing the well which may not have been the actual way the well was constructed. This sometimes resulted in an erroneous MASIP assignment. OC/IMD has since instituted a new procedure for reviewing completion reports (Form WH-1) ensuring that MASIP's are assigned based on the actual well construction. Also, when the former DNR computer database was converted to the new Oracle system, some older wells did not have a MASIP assigned in the old computer database. OC/IMD is currently reviewing files to validate the MASIP entry of older wells and enter the MASIP of wells with a missing value.

Recommendation II-20: OC/IMD is working within the framework of a new computer system to improve the availability of permitted surface injection pressures for injection wells.

Objective III: Does Louisiana Apply Corrective Actions Effectively?

Finding—DNR Does Not Have Formal Written Criteria for Enforcement Actions

OC/IMD agrees with the audit finding. OC/IMDR also agrees that it does have informal criteria in determining the severity of needed enforcement action when issues of noncompliance are discovered. The finding acknowledges that OC/IMD takes into consideration several factors when determining what enforcement action to take. Each violation is considered individually and the appropriate enforcement action is taken. Although some violations are similar, enforcement actions may vary because of the circumstances surrounding the case.

While the report discusses inconsistencies discovered during the audit, the report does not provide suggestions on how a written enforcement policy would have been beneficial. It cannot be argued that OC/IMD is not taking appropriate or adequate enforcement actions. It can be argued that OC/IMD is doing a good job enforcing its rules and regulations when discovering violations. The number of enforcement actions taken by OC/IMD upholds this, as noted near the beginning of the audit report under the heading 'Enforcement Activities'.

OC/IMD takes the appropriate enforcement action for the given violation. Enforcement action may be issuance of a Notice of Violation (NOV), Compliance Order (CO), suspension of operating

permit, etc. Certainly, there are varying circumstances that result in differing enforcement actions being taken. Many of the Office of Conservation's regulations are broad-based and the agency has discretion on how they are to be enforced. Historically, each violation is handled individually. A cook-book method of applying enforcement actions may not work well.

Recommendation III-10: OC/IMD will consider development of formal, written criteria for enforcement actions and a penalty matrix for violations.

Recommendation III-11: OC/IMD agrees with this recommendation and will consider procedures to document how enforcement actions are determined.

Finding—Annular Disposal Permits Pose Greater Risk to Groundwater

The audit report correctly notes that a large number of permits are processed each year for wells using annular disposal of drilling muds. At the request of the EPA, OC/IMD is not reporting drilling mud disposal wells to the EPA as part of OC/IMD's annual injection well inventory. EPA is currently undecided whether drilling mud disposal of wells are within the scope of the Underground Injection Control program and the Safe Drinking Water Act. OC/IMD is in the process of promulgating revised rules to further enhance the safe operation of drilling mud disposal wells.

Concerning annular disposal of saltwater, the audit report cites three instances of wells with differing levels of enforcement action. All three wells were cited for injecting after the wells' permit expired. Enforcement action was determined on a case-by-case basis (e.g., the length of the violation and volume of fluid injected) as shown below:

- The \$9,500 penalty was based on the operator's continued injection with an expired permit from 1996 to 1998 and the volume of waste disposed (382,880 barrels = 16,080,960 gallons) during that period. The violation was discovered during a routine OC/IMD file review. The operator admitted to the violation and provided documentation of such.
- The \$5,000 penalty was based on a discovery made during a routine field inspection. The operator was found to be injecting saltwater after its permit expired. Unauthorized injection occurred from 1995 to 1998 with only a small volume of waste disposed. The operator did not contest the penalty.
- A OC/IMD file review discovered the third well injecting after the permit had expired. Unauthorized injection occurred from March 1998 to June 1998. This was due to an oversight by the current well operator. The well had gone through three operator changes in one month. Upon determining he was in violation, the new

operator immediately filed a new permit application which was subsequently approved.

Finding—Several Violations Did Not Result in Enforcement Action

Four wells were noted as having injected at various times above the calculated fracture pressure of the injection zone. The wells were identified by well serial numbers 970379, 209374, 026384, and 018357. OC/IMD reviewed the files of these wells and discovered enforcement actions in the form of Notices of Violation and/or Compliance Orders were issued. All four wells have complied with the terms of the enforcement action by lowering their injection pressures or have been plugged and abandoned.

The audit report identified 13 wells with violations of varying types occurring during the audited years but had no evidence of the agency taking any enforcement action. The wells, identified by their state serial numbers are:

033960	054968	126521	151113	970121	970861	972253
039707	083592	138450	185918	970365	972231	

OC/IMD reviewed the information for each well and discovered the following:

- Notices of Violation (NOV) were issued for six wells (well serial nos. 033960, 039707, 083592, 138450, 151113, 972253);
- One violation entry was recorded in the computer database in error (well serial no. 054968);
- Four wells (serial nos. 126521, 185918, 970121, 970861) had violations without OC/IMD issuing a formal enforcement/compliance action. Three violations were for delinquent reporting and one was for improper well plugging and abandoning procedures. The reporting violations were resolved with a telephone call to the wells' operator. The well plug and abandonment violation was resolved internally after a re-review of the well file.
- One well (serial no. 970365) was not a violation by the well's operator, but was a reminder to DNR's field surveillance staff that this well was overdue for a test for mechanical integrity.
- One well (serial no. 972231) has delinquent reporting violations. The type of enforcement action taken could not be found. DNR will follow-up and resolve this issue.

OC/IMD has an effective enforcement policy. The type of enforcement actions varies depending on given circumstances. OC/IMD is committed to resolve any and all violations.

Finding—Poor Internal Controls Over Penalty Collection

The audit report correctly notes flaws in the procedures for handling monies collected. We agree that monies received should first be routed to DNR's accounting division. However, DNR's accounting division is the final authority on financial policies, including handling of monies received.

Our internal procedures have changed since the 1998 - 1999 legislative audit period. One person (not associated with the enforcement section) receives checks for civil penalties, enters the information into the computer, then delivers the checks to the accounting division the same day it is received. Copies of the checks and a computer printout are sent to the OC/IMD enforcement section as notification that the civil penalty has been paid. This is the same for all sections.

At one time we were allowed to hold checks for various reasons, such as specific hearing fees and disputed compliance issues. This was the reason for not depositing the two checks cited in the audit report.

It is sometimes difficult to collect civil penalties from small independent operators. Some penalties are uncollected because the operator has gone out of business. This OC/IMD does whatever it can to legally collect civil penalties. As shown in the audit report, we have a 95 percent civil penalty collection rate.

Recommendation III-12: OC/IMD is currently working within the framework of the policies and procedures of the DNR accounting section.

Finding—DNR Conducted Follow-up to Ensure That Violators Returned to Compliance

The audit report correctly points out that OC/IMD makes every reasonable effort to follow-up on noncompliant issues to ensure that operators are compliant.

APPENDIX K-4

Department of Agriculture and Forestry's Response

This letter was written as a response to a draft copy of our audit report. This final audit report contains revisions made as a result of the exit conference and this response letter. Therefore, some statements in the department's response letter may have already been addressed in this final audit report. In addition, each department only received a copy of its portion of this audit. Therefore, page numbers in the response may not correspond with actual page numbers in this report.



LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY

BOB ODOM, COMMISSIONER

W.G. "BUD" COURSON, DEPUTY COMMISSIONER



December 22, 2000

ASSISTANT COMMISSIONERS

Agricultural & Environmental Sciences

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Mr. David K. Greer, CPA, CFE
Office of Legislative Auditor
Post Office Box 94397
Baton Rouge, LA 70804-9397

Dear Mr. Greer:

The following is this Department's written response to the document that you have identified as your report, "Water Quality in Louisiana," in your letter of December 8, 2000.

In attempting to identify and describe the two main offices related to water protection, the report appears to state the duties of the Office of Soil and Water Conservation and the Office of Agriculture and Environmental Sciences. The descriptions of the duties provided in the report understate the duties of both offices in their totality and with reference to the duties pertaining to water.

The report is purportedly addressing four different state departments, but the report does not name any department other than the Department of Agriculture and Forestry. Some references to departments in the report are unstated or are ambiguous. For example, the report states that, "EPA audit findings show that some departmental programs often have insufficient monitoring and enforcement procedures." If this statement of the report is intended to refer to this Department, it is in error and, if not intended to refer to this Department, it is ambiguous.

The report refers to specific cases or examples it uses to reach certain conclusions, but fails to provide the identity of those cases or examples, making any meaningful response by the Department impossible. For example, on page 6, the report states, "...we found two cases where..." the "...warning letters were not considered." Obviously, without the identity of the cases relied upon, the Department cannot refute the merits of such assertions in this reply.

The report states that the Department reported 103 warning letters to the EPA for calendar year 1999, and that was more than the Department actually issued. This statement of the report is erroneous. The Department did not report 103 warning letters to EPA for calendar year 1999.

Mr. Greer
December 22, 2000
Page 2

The report states that, "The frequency of the number of inspections conducted is usually dictated by a yearly work plan . . ." The work plan does not determine, nor dictate the frequency of inspections.

The report states that some applicators use scraps of paper to keep records. It should be noted that some applicators keep field records on hand-held pieces of paper or notebooks and later transfer this information. For obvious reasons, it would not be a safe practice to try and maintain complete records while flying an airplane with an open cockpit.

There are other portions of the report which are noteworthy and erroneous for various reasons, and I will attempt to address them in the course of responding to the recommendations contained in the report.

Recommendation II-20: DAF should modify its electronic database to track inspections by type to ensure that they meet its policy of conducting record review inspections annually.

Recommendation III-14: DAF should ensure that its database includes historical data on pesticide applicators. DAF should also develop an integrated system that includes data on complaints, violations, inspections, certificates, and other compliance information.

The DAF (Department) presently has a database that tracks inspections by the type of inspection, and that includes data on complaints, violations, inspections, certificates, and other compliance information. The data is recorded manually and electronically.

The Department began converting to an electronic system (computers) in tracking pesticide enforcement activities approximately five years ago. Throughout this five year period, the Department has continuously upgraded and expanded the data program to identify and include additional fields that need to be tracked, and will continue to do so. The Department recently hosted a workshop for the five states in EPA Region VI to develop a universal format for enforcement tracking that will be used by all states of the region. The Department will be incorporating this data entry format into our existing electronic tracking system. This data entry format will have a database that electronically tracks the types of inspections now in the manual database. The electronic database will eventually, and as the state's funding permits, include all data that are relevant to enforcement and reporting functions, in addition to basic EPA requirements.

Mr. Greer
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Page 3

Recommendation II-21: DAF should develop formal written policies to replace its informal ones.

The Department has a formal unwritten policy that the records of all commercial applicators shall be reviewed on an annual basis. The Department is currently working on developing written policies.

Recommendation II-22: DAF should develop a standardized form on which applicators can record pesticide application information.

The Department does have a standardized form. The regulations clearly dictate the information that is required to be kept by each commercial applicator. It is left to the applicator as to whether he chooses to use the standardized form or a format approved by the Department.

Recommendation III-13: DAF should consider prior warning letters when determining the severity of the enforcement action and penalty in accordance with its enforcement response policy.

The report makes an attempt to encourage an unworkable policy of treating a warning as an offense. Since a warning is not an offense, for the state to treat it as such is a clear violation of the "due process" clause of the United States Constitution.

Warning letters may be considered in sentencing, but not as actual violations which they clearly are not. Warning letters are just one of several means used in implementing desirable and effective diversionary programs.

The present policy of the Department, an EPA approved Enforcement Response Policy (ERP), is of a type used for at least decades, and enjoys a good reputation as to result. To employ the suggested policy would defeat the whole purpose of using "warning letters." The "warning letter" serves to keep alleged offenders out of the ERP system and encourages applicators to maintain compliance, an objective of the program. Commercial Applicators that receive a warning letter anytime during a calendar year must attend a Departmental Drift Minimization training program prior to receiving a certification for the next year. This additional schooling promotes proficiency in the application of pesticides, another objective of the program, as well as compliance.

The report states that "DAF's enforcement actions" could be more stringent and that "DAF ... could have issued higher" penalties. These statements can be applied to every sentence or penalty in every case of adjudication that does not impose the maximum penalty. Such statements are not meaningful or helpful.

Mr. Greer
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“Hearing Cases Not Resolved Timely and Penalties Not Always Collected”

The report makes the following statements: “None of the violations that resulted in hearings in 1999 were resolved timely.” “...the commissioner did not sign the stipulation until over a year later after the Advisory Commission on Pesticides assessed a penalty.”

It is generally accepted in the regulatory community that closure of a case involving environmental violations takes one or more years. Other cases in the judicial system take one or more years, and some take decades. In this system that is the subject of the report, the members of the Advisory Commission on Pesticides serve voluntarily, i.e. without pay. The commissioner has a myriad of other mandatory duties. Resolving cases within two years is remarkably timely under the circumstances.

The report also makes several inane observations about penalties “not always being collected.” To the experienced and informed, not always collecting penalties is a necessary and expected fact of all enforcement programs, both civil and criminal.

The Department has a policy and procedure for collecting fines based on reality and reason. There are situations where costs to collect a fine would far exceed the fine to be collected. There are circumstances where collection of the fine can never occur.

The report does not state that penalties that could have been collected with reasonable effort and cost are not collected. That would be a meaningful statement. Of course, that statement cannot truthfully be made, as all penalties that can be collected with reasonable effort and cost are pursued.

The report states that “the commissioner rescinded a \$5,000.00 penalty and instead suspended the applicator’s license.” It should be noted that under the ERP, this suspension is a more severe penalty than the \$5,000.00 monetary penalty. By the commissioner’s action, the violator was denied the ability to earn his living as an applicator for the relevant period of time. It is unclear how the report can reach the conclusion it does from the facts it asserts.

In conclusion, I must observe that the report is highly inaccurate and highly critical. One cannot but wonder how it can be that so much criticism was based upon so much erroneous information.

Mr. Greer
December 22, 2000
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When the Department's statewide monitoring program is viewed by those experienced and informed in the field, the program is recognized nationally as one of the best programs in existence. This is the same program that has developed a water program initiative cited by EPA Region VI as a model program.

When given a fair review, this program will receive a different result than the one contained in the report.

Very truly yours,

A handwritten signature in black ink, appearing to read "Skip Rhorer". The signature is fluid and cursive, with the first name "Skip" being more prominent.

Skip Rhorer
Assistant Commissioner

SR:sw

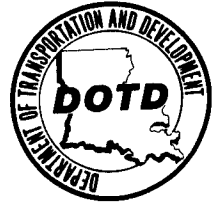
APPENDIX K-5

Department of Transportation and Development's Response

This letter was written as a response to a draft copy of our audit report. This final audit report contains revisions made as a result of the exit conference and this response letter. Therefore, some statements in the department's response letter may have already been addressed in this final audit report. In addition, each department only received a copy of its portion of this audit. Therefore, page numbers in the response may not correspond with actual page numbers in this report.



STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P. O. Box 94245
Baton Rouge, Louisiana 70804-9245



M. J. "MIKE" FOSTER, JR.
GOVERNOR

December 21, 2000

KAM K. MOVASSAGHI
SECRETARY

Mr. Daniel G. Kyle, Ph.D., CPA, CFE
Legislative Auditor
P. O. Box 94397
Baton Rouge, LA 70804-9397

SUBJECT: Draft Report
Water Quality In Louisiana

Dear Dr. Kyle:

We have reviewed the DOTD part of the subject report and our comments are as follows:

1. The report under the DOTD heading states "In FY 2000, the Water Resources Program had a total of 44 employees and a budget of \$4,095,331."

COMMENT:

- You may wish to add a clarification that this budget is for the entire Public Works and Water Resources Division, which includes such functions as Flood Control and Port Priority Programs, Water Well Program, Flood Plain Management, Dam Safety, Navigation, assistance to local agencies such as levee boards, etc. For your information, there are only five (5) employees in the Water Resources Section managing the Water Well Registration and Inspection Program, Water Well Drillers' Licensing Program, Water Resources Data Collection & Dissemination Program, etc.

2. Enforcement Activities:

COMMENT:

- Number of alleged violations still under review is 14, as of this date.

Dr. Daniel G. Kyle
December 21, 2000
Page 2

- Annual continuing education requirement to renew a driller's license was legislated by Act 122 of 1997, not by court ruling as stated.

Thank you for the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kam K. Movassaghi', written in a cursive style.

Kam K. Movassaghi, Ph.D., P.E.
Secretary