

***STATE OF LOUISIANA  
LEGISLATIVE AUDITOR***

**Management of  
Hazardous Waste  
in Louisiana**

November 1995



***Performance Audit***

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

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**November 1995**



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

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

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November 8, 1995

Honorable Samuel B. Nunez, Jr.,  
President of the Senate  
Honorable John A. Alario, Jr.,  
Speaker of the House of Representatives  
and  
Members of the Legislative Audit Advisory Council

Dear Legislators:

This is our report of the performance audit of the Department of Environmental Quality Management of Hazardous Waste in Louisiana. This audit was conducted under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. All performance audits are conducted in accordance with generally accepted government auditing standards.

The report presents our findings, conclusions, and recommendations as well as the response of the Department of Environmental Quality.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel G. Kyle", is written over a horizontal line.

Daniel G. Kyle, CPA, CFE  
Legislative Auditor

DGK/jl

(LEGLTR)





# Office of Legislative Auditor

## Executive Summary

### Performance Audit Management of Hazardous Waste in Louisiana

#### **Audit Initiation and Objectives**

The Legislative Audit Advisory Council directed us to conduct a performance audit on environmental issues which impact the state of Louisiana. The council asked us to review the management of hazardous waste in Louisiana. This entailed a review of the Inactive and Abandoned Hazardous Waste Sites Program and Louisiana's administration of the Federal Resource Conservation and Recovery Act Program, commonly referred to as RCRA. The audit had the following three objectives:

- ♦ **Determine if the Department of Environmental Quality is actively identifying, assessing, and remediating inactive and abandoned hazardous waste sites.**
- ♦ **Determine if the department's manifest system is accomplishing its objective of tracking the generation, treatment, transportation, and disposal of hazardous waste.**
- ♦ **Determine the extent to which the department is regulating hazardous waste through its inspection, permitting, and enforcement activities.**

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## **Inactive and Abandoned Hazardous Waste Sites**

The Department of Environmental Quality (DEQ) estimates that there are potentially 155 inactive and abandoned hazardous waste sites in Louisiana for which the state may be responsible for cleanup. It could cost over a quarter billion dollars to clean up these sites if no other funding source is identified. Because of the current annual state funding level of 2.6 million dollars, over 100 years will be required to clean up these sites. The longer it takes to clean a site the more expensive and complex the cleanup becomes.

DEQ has not promulgated rules and regulations for the Inactive and Abandoned Sites Program. Individuals responsible for cleanup of a site could contest any decision by DEQ on the grounds that the department has no regulations to support its position. In addition, the program does not actively seek to identify all those hazardous waste sites which can pose a threat to human health and the environment. Furthermore, the program does not have a prioritization system finalized for assessing and cleaning sites. Program officials said limited resources do not allow for effective operation of the program.

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## **Manifest System**

DEQ's manifest system does not serve its intended purpose of tracking hazardous waste shipments from "cradle to grave" and generating accurate, current data on hazardous waste shipments. The system's current operation has compounded workload problems and hindered its usefulness by 1) creating a system that tracks waste from disposal to generation rather than from generation to disposal; 2) adding to a substantial manifest backlog; and 3) pursuing limited, untimely follow-up on missing manifests.

DEQ uses annual hazardous waste reports from large quantity generators and treatment, storage, disposal, and recycle/reuse facilities to account for hazardous waste generated and managed. While most generators are required to submit annual reports, all are not submitting these reports. Consequently, the department cannot readily determine the amount of all hazardous waste generated in the state and, therefore, cannot ensure that the waste is properly managed.

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## **Regulatory Program**

DEQ has followed established and approved procedures for regulating companies that produce and manage hazardous waste. For federal fiscal year 1994, the Environmental Protection Agency concluded that DEQ had met or exceeded all of its commitments regarding inspection, permitting, and enforcement activities. However, several aspects of the program were not being managed adequately. DEQ did not have an adequate system for regularly inspecting all generators of hazardous waste, handling complaints regarding hazardous waste, and taking actions against violators of hazardous waste regulations.

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## **Recommendations**

- 1. Consistent with the current operations of the program, the Department of Environmental Quality should promulgate rules and regulations for the Inactive and Abandoned Sites Program.**
- 2. For the purpose of identifying other inactive and abandoned hazardous waste sites which may pose a threat to human health and the environment, the Department of Environmental Quality should, at a minimum, develop a statewide survey to query industry, governmental agencies, and the private sector.**
- 3. To ensure that the department's limited resources are concentrated on the most hazardous sites, the department should finalize criteria to prioritize which sites should be assessed and remediated based on their threat to human health and the environment.**
- 4. The Hazardous Waste Division should eliminate the manifest backlog and redesign the system to efficiently accomplish its original purpose of tracking hazardous waste. Some elements which must be incorporated into the revised system include:**

- **entry into the system of manifest copies received from generators and designated facilities upon receipt to allow for data accessibility, computer matching, and sorting; and**
  - **institution of daily error and exception reports to permit quick identification of errors and missing manifests.**
5. **To better determine the amount of hazardous waste generated in the state, the Department of Environmental Quality should make every effort to ensure that all facilities submit their annual reports as required.**
  6. **Given the inspection rates for class two and class three generators and their potential for harm, the Department of Environmental Quality should examine the possibility of developing a schedule for monitoring these generators, thereby increasing their awareness of and compliance with hazardous waste regulations.**
  7. **To ensure that all complaints are investigated in a timely manner, the Department of Environmental Quality should implement the following procedures:**
    - **require regional offices to maintain a complaint log and immediately submit all complaints to headquarters upon receipt as proof of the date they were actually received**
    - **require regional offices to submit all completed complaint inspections to headquarters so that the date of the investigation can be matched to the date when the complaint was received to ensure that all complaints are being investigated timely**

- **ensure that all inspectors are using a uniform complaint inspection form by immediately finalizing its uniform complaint inspection form**
  - **require appropriate review of all complaint inspections**
- 8. The Department of Environmental Quality should implement procedures to ensure that enforcement actions are processed timely in accordance with EPA standards.**

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### **Matters for Legislative Consideration**

- 1. The legislature should consider alternative funding measures to ensure that adequate funding and staffing are available to the Inactive and Abandoned Sites Program for effective administration. The alternative measures could include the following:**
  - **eliminating or increasing the 4 million dollar annual cap on the State Hazardous Waste Site Cleanup Fund**
  - **evaluating the existing fee structure for the regulated community and increasing or assessing additional fees**
- 2. The legislature may wish to consider enacting statutory requirements in accordance with EPA policies to require the Department of Environmental Quality to issue multi-day penalties to bring facilities operating out of compliance back into compliance with environmental regulatory standards.**



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# Chapter One: Introduction

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## **Audit Initiation and Objectives**

The Legislative Audit Advisory Council directed us to conduct a performance audit on environmental issues which impact the state of Louisiana. A study of this type involves a broad spectrum of issues pertaining to air quality, water quality, control of radiation, regulation of solid and hazardous waste, environmental justice, and other matters of environmental concern.

In response to the council's direction and based on background research, our audit focused on Louisiana's management of hazardous waste. This entailed a review of the Inactive and Abandoned Hazardous Waste Sites Program and Louisiana's administration of the Federal Resource Conservation and Recovery Act Program, commonly referred to as RCRA. The audit had the following three objectives:

- ♦ **Determine if the Department of Environmental Quality is actively identifying, assessing, and remediating inactive and abandoned hazardous waste sites.**
- ♦ **Determine if the Department of Environmental Quality's manifest system is accomplishing its objective of tracking the generation, treatment, transportation, and disposal of hazardous waste.**
- ♦ **Determine the extent to which the Department of Environmental Quality is regulating hazardous waste through its inspection, permitting, and enforcement activities.**

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## **Report Conclusions**

The Department of Environmental Quality (DEQ) estimates that there are potentially 155 inactive and abandoned hazardous waste sites in Louisiana for which the state may be responsible for funding cleanup. It could cost over a quarter billion dollars to clean up these sites if no other funding source is identified. Because of the current annual funding level of 2.6 million dollars, over 100 years will

be required to clean up these sites. The longer it takes to clean a site the more expensive and complex the cleanup becomes.

DEQ has not promulgated rules and regulations for the Inactive and Abandoned Sites Program. Individuals responsible for cleanup of a site could contest any decision by DEQ on the grounds that the department has no regulations to support its position. In addition, the program does not actively seek to identify all those hazardous waste sites which can pose a threat to human health and the environment. Furthermore, the program does not have a prioritization system finalized for assessing and cleaning sites. Program officials said limited resources do not allow for effective operation of the program.

DEQ's manifest system does not serve its intended purpose of tracking hazardous waste shipments from "cradle to grave" and generating accurate, current data on hazardous waste shipments. The system's current operation has compounded workload problems and hindered its usefulness by 1) creating a system that tracks waste from disposal to generation rather than from generation to disposal; 2) adding to a substantial manifest backlog; and 3) pursuing limited, untimely follow-up on missing manifests.

To account for hazardous waste generated and managed in the state, the department uses annual hazardous waste reports from large quantity generators and treatment, storage, disposal, and recycle/reuse facilities. While most generators are required to submit annual reports, not all are submitting these reports. Consequently, the department cannot readily determine the amount of all hazardous waste generated in the state and, therefore, cannot ensure that the waste is properly managed.

In fiscal year 1994, the Environmental Protection Agency concluded that DEQ had met or exceeded all of its commitments regarding inspection, permitting, and enforcement activities. While DEQ has followed federal standards for regulating companies that produce and manage hazardous waste, we found several aspects of the program that were not being managed adequately. DEQ did not have an adequate system for regularly inspecting all generators of hazardous waste, handling complaints regarding hazardous waste, and taking actions against violators of hazardous waste regulations.



## Program Background

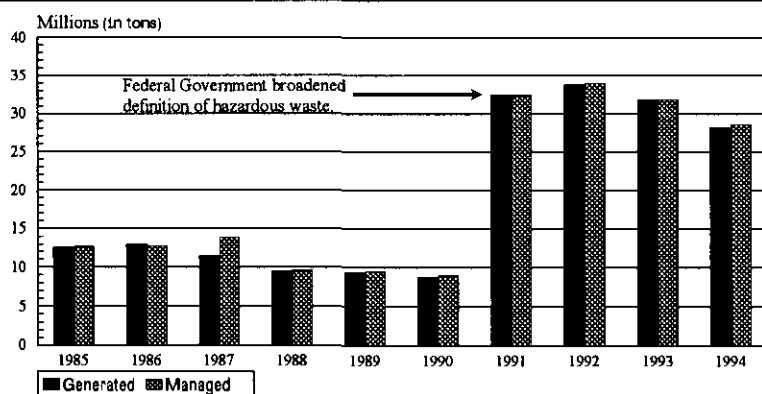
### An Overview of Hazardous Waste Management

In recent years, the public and private sector have come to recognize the danger resulting from the mismanagement of hazardous waste. Starting with the Solid Waste Disposal Act of 1965, the federal government enacted laws over the next two decades which changed the views of citizens and industry about hazardous waste management. Louisiana and other states followed with similar related laws to promote proper waste management.

**Louisiana generates the third largest volume of hazardous waste in the United States.** In 1994, 292 Louisiana generators produced 28.08 million tons of hazardous waste. Chemical and petroleum industries generated most of these wastes. In addition, during the same year, 55 Louisiana treatment, storage, disposal, and recycle/reuse facilities managed 28.66 million tons of hazardous waste. The management of waste includes treatment, storage, and disposal of wastes produced in-state (less amounts exported and recycled on-site), and the amount of waste imported.

Exhibit 1-1 below shows the amount of hazardous waste generated and managed by Louisiana for calendar years 1985-1994. The difference between the amount of waste generated and managed is the amount of waste net imported/exported. In 1994, Louisiana imported 177,000 more tons of hazardous waste than it exported.

**Exhibit 1-1**  
**Amount of Hazardous Waste Generated by Louisiana**  
**for Calendar Years 1985-1994**



Source: Prepared by legislative auditor's staff from information provided by Louisiana Department of Environmental Quality.

**State and federal laws govern Louisiana's hazardous waste management program.** The Louisiana Hazardous Waste Control Law, Louisiana Revised Statute (LSA-R.S.) 30:2171, establishes the state's jurisdiction over the management of hazardous waste and the establishment of a comprehensive and detailed program of statewide regulation. Through this law, the state regulates generators of hazardous waste, sets standards and procedures for waste generation and reporting, and establishes a permit process for treatment, storage, and disposal facilities. It also authorizes inspections of hazardous waste generators, transporters, treatment, storage, and disposal facilities and conducts enforcement activities when these entities violate state laws and regulations.

Louisiana enacted its hazardous waste program in response to the federal Resource Conservation and Recovery Act passed in 1976 and amended in 1984. The Resource Conservation and Recovery Act establishes guidelines for the management of current and planned hazardous waste generation, transportation, treatment, and disposal activities. It establishes criteria to identify what wastes are hazardous and standards to regulate generators, transporters, and treatment, storage, and disposal facilities. The Resource Conservation and Recovery Act also establishes guidelines under which a state may administer and enforce its own hazardous waste program in lieu of the federal program. States obtain authority to administer their hazardous waste programs from the U.S. Environmental Protection Agency (EPA). Louisiana received federal authorization to implement Resource Conservation and Recovery Act provisions on February 7, 1985.

The Louisiana Hazardous Waste Control Law defines hazardous waste as any waste or combination of wastes, which because of its quantity, concentration, physical or chemical characteristics may cause or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed, or otherwise managed. A waste is also considered hazardous if it exhibits one of four characteristics: ignitibility, corrosivity, reactivity, and toxicity. Some examples of hazardous waste materials are paint wastes, certain degreasers, alkaline cleaning fluids, battery acids, cyanide plating wastes, heavy metals (such as mercury, cadmium, or lead), and specific pesticides.

**Generators of hazardous waste, based on the amount of hazardous waste they produce and accumulate per calendar month, have different degrees of regulation.**

Generators are required to keep records that identify the type and amount of hazardous waste they generate and accumulate and must follow proper storage, labeling, and handling practices. Also, generators who ship hazardous waste off-site for treatment, storage, or disposal must document by means of a manifest system that the hazardous waste was delivered to a permitted treatment, storage, or disposal facility. The various categories of generators in Louisiana are as follows:

- ◆ **Large Quantity Generators (Class One)**--These generators produce over 1,000 kilograms (2,200 pounds) of hazardous waste per month and are most heavily regulated by DEQ. Large quantity generators must report annually to DEQ and biennially to EPA a description of the hazardous waste shipped and the names of each transporter who handled the waste.
- ◆ **Large Quantity Generators (Class Two)**--These generators produce from 100 kilograms (220 pounds) to no more than 1,000 kilograms of hazardous waste per month. They are not required to submit biennial reports but are required to report annually to DEQ and follow manifest requirements.
- ◆ **Small Quantity Generators (Class Three)**--These generators produce less than 100 kilograms of hazardous waste per month and are only required to submit an annual report to DEQ if they ship waste off-site.

When producers of hazardous waste improperly store or dispose of their wastes, environmental contamination can occur. Contaminated hazardous waste sites are cleaned up either through the federal Superfund Program, parties responsible for creating the hazardous waste site, or the state funded Inactive and Abandoned Hazardous Waste Site Cleanup Program.

The Superfund Program was designed to clean up the nation's most serious confirmed hazardous waste sites. Louisiana has 14 sites on the Superfund cleanup list. Parties responsible for creating the waste site, with oversight from EPA and DEQ, generally clean up Superfund sites.

Sites that are not serious enough to be cleaned up by the federal Superfund Program fall under the jurisdiction of DEQ. Most of the hazardous waste sites in Louisiana, with known contamination, have parties responsible for creating the waste site. With supervision from DEQ, all parties responsible for creating the waste site fund cleanup activities either voluntarily or under enforcement action.

DEQ performs cleanup activities at those sites that are under its jurisdiction when the parties responsible for causing the waste site cannot be identified or have declared bankruptcy. DEQ uses money from the Hazardous Waste Site Cleanup Fund to hire contractors to develop and implement a cleanup plan for each site. To ensure that sites are properly cleaned up, DEQ monitors the activities of both parties responsible for causing the waste site and private contractors during cleanup. Once cleanup activities have been completed, DEQ conducts follow-up monitoring to verify whether all wastes have been removed or contained.

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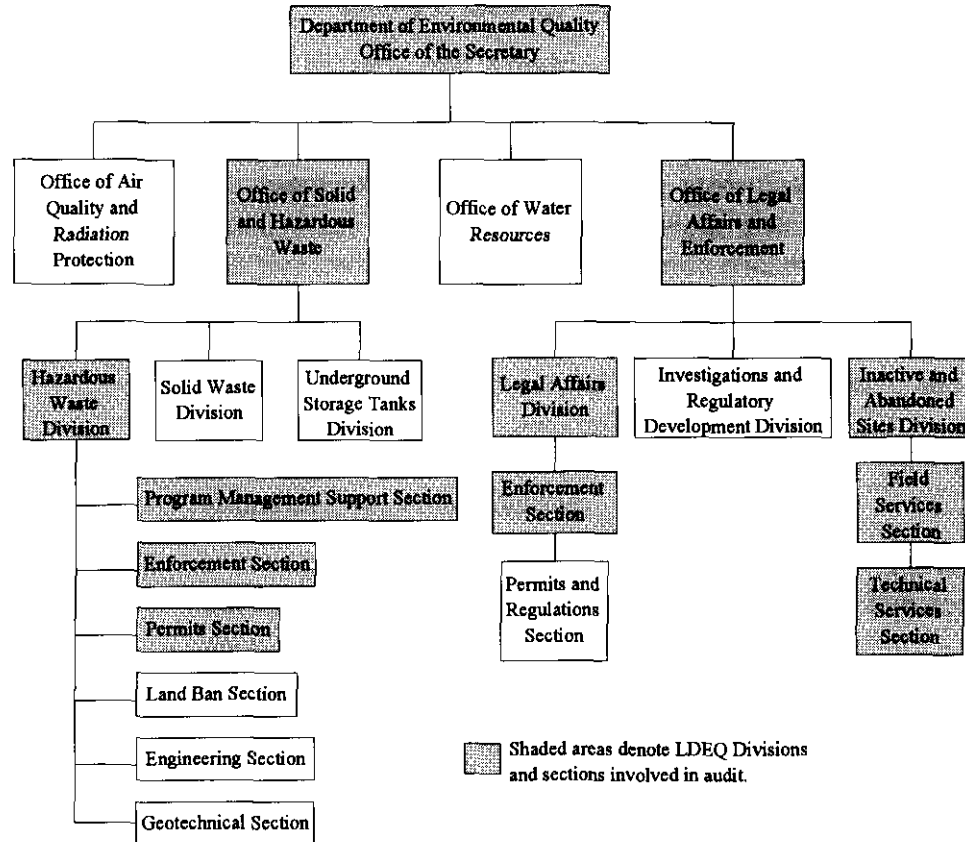
## **Program Organization**

### **Department of Environmental Quality Administers Louisiana's Hazardous Waste Programs**

The purpose of Louisiana's hazardous waste programs is to ensure that hazardous waste is transported, disposed of, stored, treated, and if contamination occurs, cleaned up in a manner adequate to protect human health, safety, and the environment.

The Louisiana Department of Environmental Quality accomplishes this purpose primarily through its Hazardous Waste Division, Inactive and Abandoned Sites Division, and Legal Affairs Division. The department is headquartered in Baton Rouge and has hazardous waste personnel located in seven regional offices located in Baton Rouge, Kenner, Lafayette, Lake Charles, Monroe, Pineville, and Shreveport. The Inactive and Abandoned Sites Division and the Legal Affairs Division have no personnel located in field offices. Exhibit 1-2 on page 7 shows the organizational structure of the department.

**Exhibit 1-2  
Department of Environmental Quality  
Organizational Chart**



Source: Prepared by legislative auditor's staff with information provided by Louisiana Department of Environmental Quality.

**Hazardous Waste Division.** This division is responsible for implementing programs designed to ensure proper planning and management of hazardous waste. Three sections within this division administer these programs.

- ◆ The Permitting Section reviews operating, closure, and post closure permit applications and permit modifications for treatment, storage, and disposal facilities.
- ◆ The Enforcement and Inspection Section conducts compliance evaluation inspections, complaint investigations, referral investigations, general inspections, and follow-up inspections; enforces regulations; and maintains compliance records of hazardous waste facilities.

- ♦ The Program Management Support Section is responsible for the manifest system. The section is also responsible for generating annual reports for the state and biennial reports for EPA.

**Inactive and Abandoned Sites Division.** This division administers the Inactive and Abandoned Sites Program. The mission of this program is to protect the public health and environment through the discovery, identification, and cleanup of inactive and abandoned hazardous waste sites in Louisiana. The Inactive and Abandoned Sites Division contains two sections, Technical Services and Site Assessment and Remediation. Technical Services handles community relations, federal grants, and manages cleanup contracts. The Site Assessment and Remediation Section is responsible for field activities involving investigating potential sites, planning for remedial activities, and overseeing remedial activities.

**Legal Affairs Division.** This division provides legal advice to staff during the course of enforcement. This includes decisions as to whether or not formal action takes place and litigating hazardous waste cases.

**Regional Offices.** These offices carry out the compliance and enforcement activities for the Hazardous Waste Program. More specifically, the regions:

- ♦ conduct inspections of treatment, storage, and disposal facilities and large and small quantity generators per the department's memorandum of agreement with the agency;
- ♦ investigate complaints involving hazardous waste cases; and
- ♦ initiate administrative actions in enforcement cases.

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## **Program Resources**

For fiscal year 1994, DEQ spent 6.6 million dollars for regulating and managing hazardous waste in Louisiana. More than 37 percent of the total amount expended came from federal sources. Exhibit 1-3 on page 9 shows the sources of funding for the Hazardous Waste Program and the Inactive and Abandoned Sites Program.

**Exhibit 1-3  
Means of Financing for the  
Hazardous Waste and Inactive and  
Abandoned Sites Divisions  
Fiscal Year 1994**

Means of Financing	Actual Funds	Percent of Total
<b>Hazardous Waste Division</b>		
Self-Generated Revenue	\$234,872	5.3%
Environmental Trust Fund	\$2,237,799	50.8%
Federal Funds	\$1,935,471	43.9%
<b>Subtotal</b>	<b>\$4,408,142</b>	<b>100.0%</b>
<b>Inactive and Abandoned Sites Division</b>		
Self-Generated Revenue	\$5,000	0.2%
State Hazardous Waste Site Cleanup	\$348,595	16.0%
State General Fund	\$1,300,460	59.7%
Federal Funds	\$524,816	24.1%
<b>Subtotal</b>	<b>\$2,178,871</b>	<b>100.0%</b>
<b>Total Expenditures</b>	<b>\$6,587,013</b>	

Source: Prepared by legislative auditor's staff using budget documents provided by Louisiana Department of Environmental Quality.

The largest source of funding for the Hazardous Waste Program is the Environmental Trust Fund. This fund was created by the legislature to defray the cost to the department of permitting, monitoring, investigating, maintaining, and administering the various environmental programs, including the Hazardous Waste Program. This fund receives monies from penalty assessments, enforcement actions, and fees collected for processing permit applications and permit modifications.

The Inactive and Abandoned Sites Program is the only program at the department that receives funding from the state General Fund. It is this funding source for which all operational costs were handled. This source of funding has been eliminated and replaced by legislation allowing the operation of the division administratively out of the Hazardous Waste Site Cleanup Fund. The Hazardous Waste Site Cleanup Fund dedicates 4 million dollars per year for funding hazardous waste site cleanup

activities. Beginning in fiscal year 1996, 1.4 million dollars of this fund will go toward operational costs for the division. This leaves a total of 2.6 million dollars a year for hazardous waste site cleanup activities. Only \$348,595 (8.7 percent) was expended from this fund for cleanup activities in fiscal year 1994. It should be noted that \$671,626 was spent in fiscal year 1995. The division's funding for fiscal year 1996 is \$5,840,944.

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## Federal Oversight

### **DEQ Establishes Annual Commitments With the Environmental Protection Agency**

As required through its Memorandum of Agreement with the U.S. Environmental Protection Agency (EPA), DEQ must make and meet various commitments in the areas of permitting, inspection, and enforcement to receive EPA grants. DEQ and EPA agree to develop these commitments on an annual basis.

**EPA assesses the administration and enforcement of the state's Hazardous Waste Program on a continuing basis for compliance with the Resource Conservation and Recovery Act.** During midyear and annual reviews of the Hazardous Waste Program, EPA generally makes on site visits to DEQ. The purpose of the visits is to review files and interview staff to determine whether commitments are being met. In addition, the visits ensure that the program is in compliance with the Resource Conservation and Recovery Act guidelines.

EPA's overview of DEQ's permitting activities focuses on facilities that are identified by the DEQ and EPA as part of annual commitments. However, EPA can also comment on any permit application or draft permit.

In the area of compliance monitoring and enforcement, EPA is authorized to inspect any hazardous waste generator, transporter, or treatment, storage, or disposal facility. EPA can also bring enforcement action against any person believed to be in violation of the state or federal Hazardous Waste Program or believed to have released hazardous wastes. The frequency of EPA's oversight and inspections will be specified in its annual commitments. EPA accompanies DEQ on a negotiated number of compliance inspections each year. Federal regulations specify that EPA may take enforcement action against any person determined to be in violation of the Resource Conservation and Recovery Act as a result of an inspection.



## **Scope and Methodology**

This performance audit was conducted under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. We followed applicable generally accepted government auditing standards as promulgated by the Comptroller General of the United States. These standards require that the audit be conducted by independent and qualified staff with due professional care. In addition, the audit team must follow standards dealing with materiality and significance, relying on the work of others, internal quality controls, and report presentation. The standards also require that the auditee be given an opportunity to respond to the audit findings and conclusions.

The audit focused on compliance and management control issues dealing with the state's management of hazardous waste. Although we were alert to any evidence of fraud and abuse in the program, we did not specifically audit these controls. Had evidence of fraud and abuse been found, we would have reported it to the Office of the Legislative Auditor's Investigative Division who audits allegations of fraud and abuse. Furthermore, we did not audit electronic data processing (EDP) controls because the Office of the Legislative Auditor's EDP Division is responsible for separately auditing such controls.

The audit was conducted from October 1994 to May 1995. The audit focused on the management of hazardous waste by the Department of Environmental Quality. Our review encompassed both state fiscal year 1994 (July 1 - June 30) and federal fiscal year 1994 (October 1 - September 30).

To address the audit objectives, we completed the following tasks:

- ◆ reviewed in-state and out-of-state reports, journals, and other articles relating to hazardous waste management
- ◆ reviewed relevant state and federal laws governing Louisiana's hazardous waste programs
- ◆ reviewed DEQ policies and procedures for its hazardous waste programs
- ◆ analyzed DEQ budget documents and data regarding inspection, complaint, and enforcement activities
- ◆ interviewed DEQ and EPA officials

- ♦ interviewed officials representing Louisiana State University, Southern University, Tulane Environmental Law Clinic, Louisiana Environmental Action Network, Louisiana Chemical Association, and the Association of States and Territorial Solid Waste Management Officials

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## **Report Organization**

The remainder of this report is organized as follows:

- ♦ **Chapter Two** discusses the Inactive and Abandoned Sites Program.
- ♦ **Chapter Three** describes Louisiana's manifest system for tracking the state's hazardous waste.
- ♦ **Chapter Four** details Louisiana's regulatory program and its effectiveness in managing hazardous waste.
- ♦ **Appendix A** lists the top fifty treatment, storage, disposal, or recycle/reuse facilities in the state by the amount of hazardous waste managed.
- ♦ **Appendix B** lists the top fifty large quantity generators in the state by the amount of hazardous waste generated.
- ♦ **Appendix C** gives general information on the hazardous waste activities of the United States and Territories from EPA's Biennial Reporting System based on 1993 data.
- ♦ **Appendix D** includes the response from the Department of Environmental Quality.

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# Chapter Two: Inactive and Abandoned Sites

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## Chapter Conclusions

The Department of Environmental Quality estimates that there are potentially 155 inactive and abandoned hazardous waste sites in Louisiana for which the state may be responsible for funding their cleanup. It could cost the state over a quarter billion dollars to clean up these sites if no other funding source is identified. Because of the current annual funding level of 2.6 million dollars, over 100 years will be required to clean up these sites.

DEQ has not promulgated rules and regulations for the Inactive and Abandoned Sites Program. The program has been in existence since 1983. Program officials said they rely on state statutes and best professional judgment evolved from designing and implementing cleanup activities over the past 10 years as standards for operating the program.

The program does not actively seek to identify inactive and abandoned hazardous waste sites which may pose a threat to human health and the environment. In addition, the program does not have a prioritization system finalized for assessing and cleaning sites. Officials of the program said limited resources do not allow for effective operation of the program.

---

## Regulations Not Promulgated

### DEQ Has Not Promulgated Regulations for the Inactive and Abandoned Sites Program

Through the enactment of the Inactive and Abandoned Waste Sites Law in 1983 and amendments in subsequent years, the Louisiana Legislature authorized the Inactive and Abandoned Sites Program. The purpose of the program is to identify, assess, and clean up inactive and abandoned hazardous waste sites resulting from past mismanagement of these wastes. Since its enactment until now, the department has not promulgated rules and regulations for the operation of the program. In accordance with LSA-R.S. 30:2226, the department was to have promulgated rules and regulations for this program no later than January 1, 1989.

The Inactive and Abandoned Sites Program has been operating since 1983 without any formal rules and regulations. Inactive and Abandoned Sites Division officials said the division has never been funded at a level that would allow them to effectively operate the program. The division uses state statutes and best professional judgment evolved from designing and implementing cleanup activities over the past 10 years as standards for operating the program. According to a division official, individuals potentially responsible for cleanup of a site could contest any decision by the division on the grounds that the division has no regulations to support its position.

The division took the initiative in fiscal year 1994 to address the lack of rules and regulations for the program. The division contracted for the services of a consulting firm to draft regulations and procedures for investigating, assessing, and cleaning sites. These regulations were written based on the level of effort and funding necessary to properly operate the program; however, this level of resources has never been achieved. Once promulgated, these regulations would establish the administrative process and standards to identify, investigate, and clean up hazardous waste sites posing a threat to public health or to the environment.

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### **Recommendation**

- 1. Consistent with the current operations of the program, the Department of Environmental Quality should promulgate rules and regulations for the Inactive and Abandoned Sites Program.**

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### **Status of Inactive and Abandoned Sites**

### **Louisiana Has 694 Inactive and Abandoned Hazardous Waste Sites**

At the end of state fiscal year 1995, the Inactive and Abandoned Sites Division had identified 694 confirmed and potential inactive and abandoned hazardous waste sites located throughout the state. Of these, there were 133 confirmed sites and 561 potential sites. Confirmed sites are sites for which the

division has confirmed the presence of hazardous substances by means of chemical analyses. Potential sites are those sites which the division possesses information about their possible existence, but site assessments to confirm their existence have not been performed.

As reported by the division, all confirmed sites are in various stages of the cleanup process. The division has identified parties responsible for causing hazardous waste contamination and who are willing to fund the cleanup of 96 of these sites. For the remaining 37 sites, no responsible parties have been identified. Consequently, the state is financially responsible for their cleanup. Exhibit 2-1 below shows the status of inactive and abandoned hazardous waste sites in the state.

**Exhibit 2-1  
Status of Inactive and Abandoned  
Hazardous Waste Sites  
As of June 30, 1995**

Status	Number	
Confirmed Sites		
Confirmed sites with potential responsible parties	96	
Confirmed sites with no potential responsible parties	37	
<b>Subtotal</b>		<b>133</b>
Potential Sites		
Potential sites where cleanup is expected	118	
Potential sites where no cleanup is expected	443	
<b>Subtotal</b>		<b>561</b>
<b>Total Number of Confirmed and Potential Sites</b>		<b>694</b>

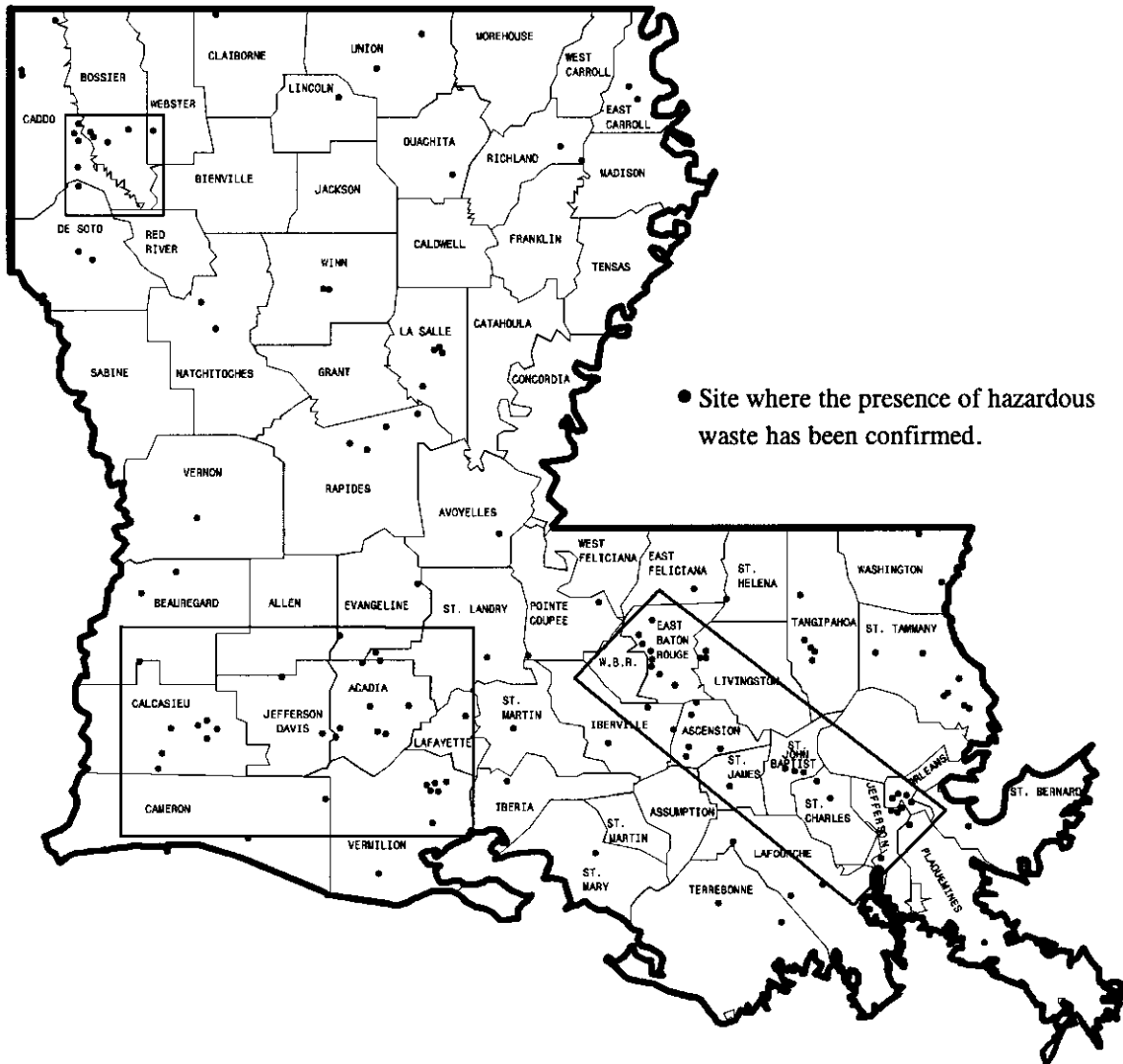
Source: Prepared by legislative auditor's staff based on information provided by Louisiana Department of Environmental Quality.

As illustrated in Exhibit 2-2 on page 16, confirmed sites are concentrated along the industrial corridor between Baton Rouge and New Orleans and in the historically oil and gas producing southern and northwestern parishes. According to division officials, confirmed sites are concentrated near rail and road junctures that are close to major river transportation routes. Exhibit 2-3 on page 17 shows the location of potential sites in Louisiana.

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**Exhibit 2-2**  
**Confirmed Sites in Louisiana**  
**for State Fiscal Year 1995**

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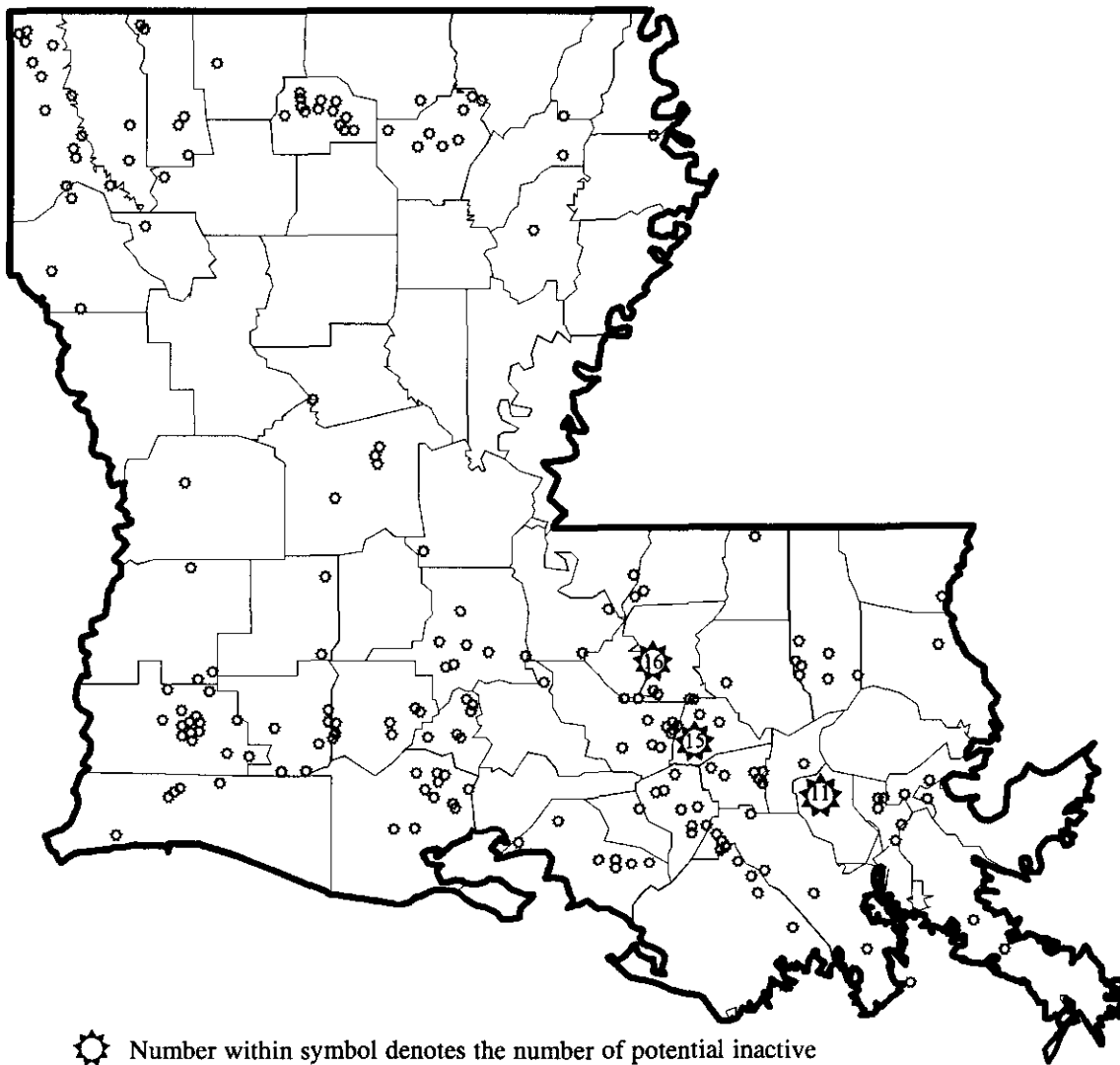
Source: Prepared by legislative auditor's staff based on information provided by Department of Environmental Quality's Inactive and Abandoned Sites Division.

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**Exhibit 2-3**  
**Potential Sites in Louisiana**  
**for State Fiscal Year 1995**

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**Note:** Map does not include 266 potential inactive and abandoned hazardous waste sites whose locations have yet to be mapped.

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**Source:** Prepared by legislative auditor's staff based on information provided by Louisiana Department of Environmental Quality.

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**Site Cleanup  
Process**

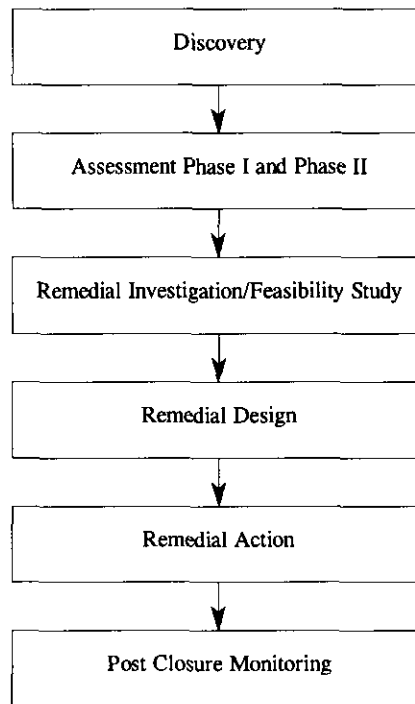
**Site Cleanup Process Takes Many Years**

The process for identifying and cleaning up a typical hazardous waste site is usually a sequential, multi-year process comprised of several time-intensive steps. The action to be taken in each step of the sequence, prior to cleanup, is usually determined by evaluation of data gathered in the previous step. Exhibit 2-4 below illustrates the site cleanup process.

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**Exhibit 2-4  
Site Cleanup Process**

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**Source:** Prepared by legislative auditor's staff based on information provided by Louisiana Department of Environmental Quality.

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The steps in the cleanup process are described as follows:

- ♦ **Site Discovery** involves the identification of new potential sites. Sites are currently discovered through notifications by the public or industry, referral from another state agency or division within DEQ, or chance discovery by division staff.



- ♦ **Site Assessment** determines whether or not a site contains hazardous substances or wastes.
- ♦ **Remedial Investigation/Feasibility Study** comprehensively identifies and quantifies all hazardous substances at a site. This is also the stage at which the Inactive and Abandoned Sites Division estimates cleanup costs.
- ♦ **Remedial Design** includes development of actual plans, specifications, and procedures necessary to implement the selected remedy.
- ♦ **Remedial Action** involves implementation of the selected remedy for the cleanup.
- ♦ **Interim Removal Action** involves implementation of a partial remedial action, such as removal of a contaminant source (for example, leaking drums) from a site.
- ♦ **Post Closure Monitoring** requires maintaining and monitoring the effectiveness of a selected remedy. This phase may require sampling and analyses of groundwater from selected monitoring wells for several years after remedial action has been completed.

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### **Deficiencies in Site Cleanup Process**

### **DEQ Is Not Actively Identifying Inactive and Abandoned Sites**

DEQ relies on citizens' complaints, referrals from other federal and state agencies, or chance discovery of new sites by its staff to identify the state's inactive and abandoned hazardous waste sites.

An active approach to locating new sites would minimize the chances of a hazardous waste site being overlooked. Such an approach may include the use of a statewide survey of industry, government, and the private sector. Department officials said they see this as a very low priority issue and if resources were available for a comprehensive search, it would be more feasible to put those resources into assessing the sites that are already known. In addition, they said that most of the major sites have already been found due to their proximity, size or departmental

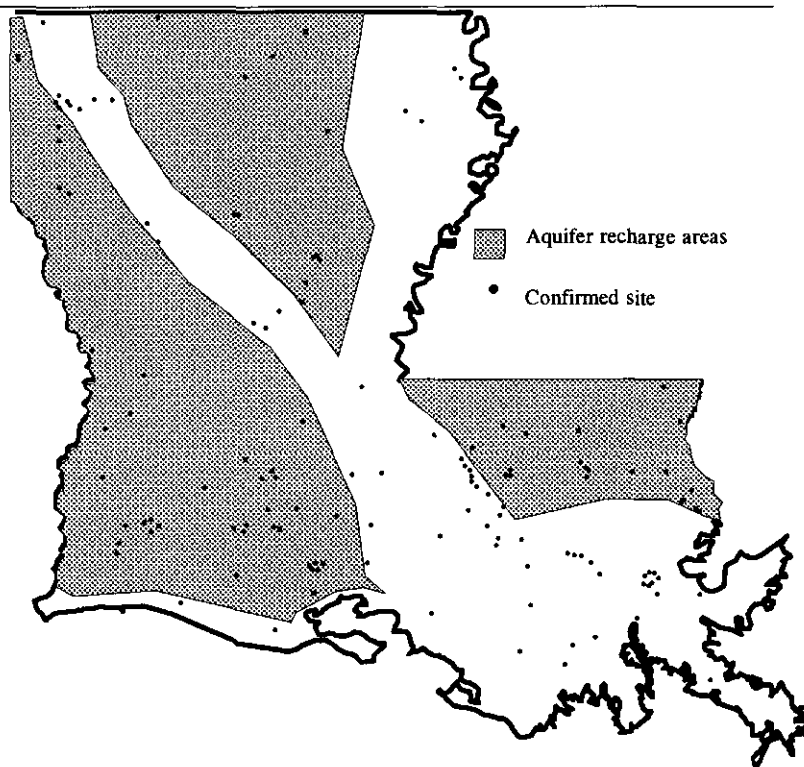
knowledge of those operations. Furthermore, they said all that remains are those sites which are small in nature and would not be worth the resources required to conduct a comprehensive search.

The effect of not identifying all the serious hazardous waste sites in Louisiana is that the citizens may be exposed to harmful contaminants in the environment, particularly since many of these sites are located above the areas that resupply water to the five major aquifers of the state. These aquifers, in conjunction with the surface waters of the state, such as the Mississippi and Red Rivers, provide most of the drinking water to the citizens of Louisiana. Furthermore, the hazardous waste from these sites may also have harmful effects on our sensitive ecological systems. Exhibit 2-5 below shows where the aquifer recharge areas are in relation to Louisiana's confirmed inactive and abandoned hazardous waste sites.

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**Exhibit 2-5**  
**Confirmed Sites and Aquifer Recharge Areas of the State**

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**Source:** Prepared by legislative auditor's staff based on information provided by Louisiana Department of Environmental Quality.

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**When potential sites are identified through the site identification process, the preliminary investigation takes an average 35 days to perform.** The Inactive and Abandoned Sites Division took an average of 12 days to perform preliminary investigations on all complaints that it directly received from citizens or industry. If another division within DEQ or governmental entity made a referral to the division, it took an average of 85 days to perform a preliminary investigation from the date the referral was made to the division. The Inactive and Abandoned Sites Division does not have any time requirements for investigating complaints of potentially new hazardous waste sites.

We conducted a file review of all 27 complaints and referrals concerning potential inactive and abandoned sites received by the Inactive and Abandoned Sites Division for state fiscal year 1994. One of these files was not included in our analysis because it was undergoing legal proceedings. Eleven of the 26 files reviewed were referrals from other sources. The remaining 15 site files were received by the Inactive and Abandoned Sites Division from complaints by citizens and industry.

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## **Recommendation**

- 1. The Department of Environmental Quality should, at a minimum, develop a statewide survey for the purpose of querying industry, governmental agencies, and the private sector. Developing and sending out a survey of this type will not tax the limited resources of the program.**

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## **Site Cleanup Not Prioritized**

### **Program Lacks a Prioritization System for Assessing and Cleaning Sites**

The division does not have a screening system to select the most hazardous sites for preliminary assessment and cleanup. Site selection is based on information contained in the primary identification and information form (the form contains the name of the site, the identification number, a description of the site, and, if known, the type of business that once occupied the site),

other site information, and case assignment strategy. This criteria may not be the best approach for determining which sites should be assessed and investigated.

Since there are 561 potential hazardous waste sites and limited staffing available, the Inactive and Abandoned Sites Division needs criteria that narrow the field to those sites that pose the greatest threat to human health and the environment. Absent these criteria, the division could exhaust its available resources without producing a significant impact on the state's inactive and abandoned sites problem. According to division officials, what is needed is not criteria, but enough staff to go out and assess sites timely so that these sites are passed on to the remediation section of the division. Ultimately, these sites will be classified by the classification system that is being developed.

The Inactive and Abandoned Sites Division has been working with a contractor to develop a tier classification system for the purpose of classifying confirmed sites. A final version of the system was received from the contractor in June of 1995. The classification system is designed to classify sites into three tiers based on the severity of contamination and threat to human health or the environment. The division plans to implement this system around the middle of December. To the extent that staffing will allow, the division will begin conducting assessments using this classification system.

The division currently remediates sites based on the availability of staffing and relies on potentially responsible parties to fund these cleanup activities. Most parties cooperate with the division in this endeavor when approached. Inactive and Abandoned Sites Division officials said their strategy has been to concentrate their staff resources at sites financed by parties responsible for causing the contamination. However, this has resulted in a shortage of available staff to oversee cleanup activities at sites for which no responsible parties have been identified.

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## **Recommendation**

- 1. To ensure that the department's limited resources are concentrated on the most hazardous sites, the department should finalize criteria to prioritize which sites should be assessed and remediated based on their threat to human health and the environment.**

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## **Assessment of Funding for Site Cleanup**

### **More Than One-Quarter Billion Dollars Needed to Clean up Existing Sites**

At the current state funding level of 2.6 million dollars per year, it could take over 28 years to clean up the 37 sites that currently have no cleanup funding source. The Inactive and Abandoned Sites Division has estimated that 2 million dollars is an average expenditure to clean up a site. Therefore, a minimum of 74 million dollars is needed to clean up the 37 sites. Division officials said the longer it takes to clean up a site, the more costly and complex cleanup can become.

The discovery of more new sites and adding them to the existing number of sites is imminent. Of the 561 potential sites, the Inactive and Abandoned Sites Division estimates that approximately 118 more sites would need some type of cleanup action. Therefore, an additional 236 million dollars must be provided by either responsible parties or the state to clean up those sites. If no responsible parties are identified, the state would be responsible for the cleanup of 155 sites at a total cost of 310 million dollars. To clean up these sites, it could take over 100 years. However, until all 561 potential sites are assessed and investigated, the division cannot determine the total amount of funds needed to clean up all sites.

In addition, Inactive and Abandoned Sites Division officials said they lack adequate staff resources to oversee any more responsible party financed cleanup. This inadequacy could result in the loss of some financed cleanups because of bankruptcy of responsible parties or willingness to take responsibility for cleanup. In such cases, where funding cannot come from other sources, the state is ultimately responsible for funding the site cleanup.

During the 1994 Regular Legislative Session, a bill was introduced to ensure adequate funding for site cleanup and hiring of additional staff. The bill would have created additional revenues for the Hazardous Waste Site Cleanup Fund and allowed the fund to be used for division operational expenses. The Inactive and Abandoned Sites Division stated, in its report to the state legislature, that this bill would have removed the 4 million dollar cap on the fund and would have added tens of millions of dollars to the fund from the levy of new hazardous waste taxes on hazardous waste handlers. This legislation was not adopted by the legislature.

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### **Matter for Legislative Consideration**

- 1. The legislature should consider alternative funding measures to ensure that adequate funding and staffing are available to the Inactive and Abandoned Sites Program for effective administration. The alternative measures could include the following:**
  - **eliminating or increasing the 4 million dollar annual cap on the State Hazardous Waste Site Cleanup Fund**
  - **evaluating the existing fee structure for the regulated community and increasing or assessing additional fees**

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# Chapter Three: Manifesting Requirements

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## Chapter Conclusions

The Department of Environmental Quality's manifest system does not serve its intended purpose of tracking hazardous waste shipments from "cradle to grave." The system's current operation has compounded workload problems and hindered its usefulness by 1) creating a system that tracks waste from disposal to generation rather than from generation to disposal; 2) adding to a substantial manifest backlog; and 3) pursuing limited, untimely follow-up on missing manifests.

To account for hazardous waste generated and managed, the department uses annual hazardous waste reports from large quantity generators and treatment, storage, disposal, and recycle/reuse facilities. While most generators are required to submit annual reports, not all are submitting these reports. Consequently, the department cannot readily and accurately determine the amount of all hazardous waste generated in the state and, therefore, cannot ensure that the waste is properly managed.

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## Manifest System Overview

### Manifest System Is an Essential Element in "Cradle to Grave" Management

A key part of the "cradle to grave" management system for the safe handling of hazardous waste is the manifest. EPA requires states to have a manifest system to track the generation, transportation, and management of hazardous wastes. States have the flexibility to develop their own manifest system within federal guidelines. The manifest system was created to ensure that all hazardous wastes transported are not illegally disposed which could lead to future hazardous waste sites.

When waste needs to be shipped, it is the generator's responsibility to make sure that a hazardous waste manifest is prepared. The manifest should describe the types of wastes and identify the transporter and the destination where the waste is to be treated, stored, disposed, or recycled/reused. All transporters of the waste (exclusive of some rail and other bulk shipments) must sign the manifest as proof that the identified waste is being

transported. The facility to receive the waste must also sign the manifest to verify that all wastes are received. Each handler of the waste must keep a copy of the manifest for at least three years. In-state generators and facilities to receive the waste are required to submit a copy of the manifest to DEQ. Out-of-state generators exporting wastes into Louisiana must send a copy of the manifest to the Louisiana Department of Environmental Quality.

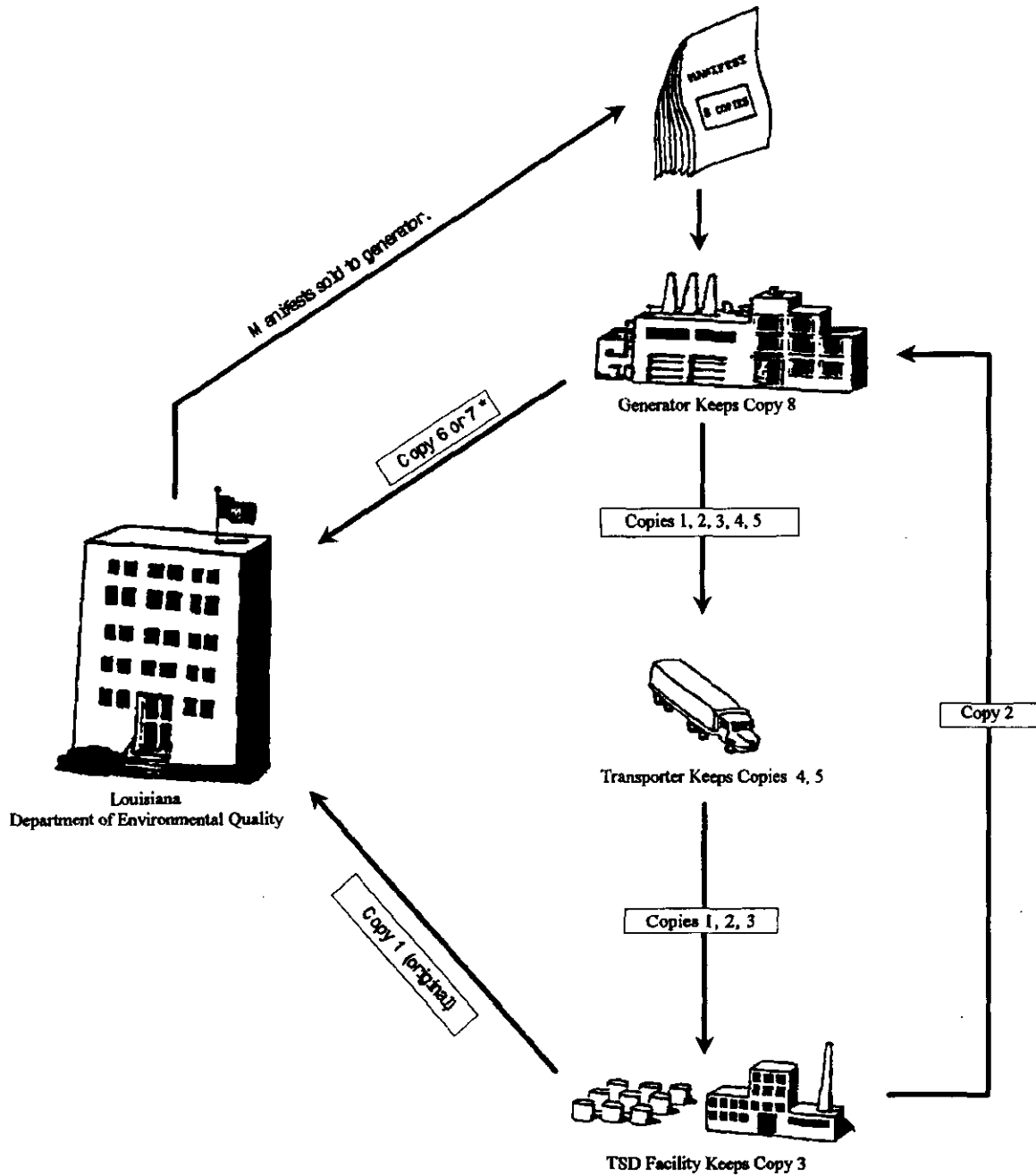
The Louisiana manifest contains one original and seven carbon copies. Copies of the manifest must be completed by each party handling the waste until the waste is received by a designated facility. As shown in Exhibit 3-1 on page 27, manifest copies are distributed in the following manner:

- ◆ **Copy Eight** - The generator retains this copy.
- ◆ **Copy Seven** - The generator mails this copy to the generator's state (no time limit specified in state statutes).
- ◆ **Copy Six** - This copy is to be used by out of state generators/out of state facilities and sent to DEQ.
- ◆ **Copy Five** - This copy is retained by first transporter.
- ◆ **Copy Four** - This copy is retained by second transporter, unless only single transporter involved, then kept by first transporter.
- ◆ **Copy Three** - The facility retains this copy.
- ◆ **Copy Two** - The designated facility must mail this copy back to the generator within 45 days of receipt of the waste as proof that the waste was actually received.
- ◆ **Copy One** (the original) - The designated facility receives the waste from the transporter and mails this copy to the department within seven days of its receipt.

**The Program Management Support Section within the Hazardous Waste Division is responsible for managing the manifest system.** The section is responsible for issuing manifests, collecting and entering data from manifests into the management information system, and following up on discrepancies from the manifests. The section is also responsible for taking information regarding rejected manifest shipments of hazardous wastes. Consequently, full or partial loads that are rejected by the designated facilities are also tracked as part of the manifest process through notifications by the designated facilities.



**Exhibit 3-1  
System for Processing Manifests**



\* Copy seven will be used by generators in Louisiana to be submitted to the department. Otherwise, copy six will be used by out-of-state generators.

Source: Prepared by legislative auditor's staff from information provided by Louisiana Department of Environmental Quality.

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**Manifest  
System Not  
Meeting  
Objective****Manifest System Unable to Account for  
All Hazardous Waste Transported**

The manifest system does not serve its intended purpose of tracking hazardous waste shipments. The current procedures used to process manifests have compounded workload problems and impeded its usefulness. According to Hazardous Waste Division officials, limited personnel resources and high turnover rates make it nearly impossible for the system to meet its objective.

The Hazardous Waste Division issued approximately 125,000 manifest forms to generators in fiscal year 1994. The division subsequently received about 250,000 manifest copies from generators and designated facilities (125,000 copies from generators and 125,000 copies from designated facilities). Data entry personnel only enter manifest data from the designated facility's manifest copy. Division officials said the waste amounts listed on this copy are more accurate than the amounts on the generator's manifest copy because the designated facility's measuring devices are more accurate. Generators usually estimate the amount of the wastes listed on the manifest form.

**The Hazardous Waste Division does not reconcile manifest copies received from generators and treatment, storage, and disposal facilities.** One full-time employee manually sorts and files all manifests before having them entered into the system by four full-time and two part-time staff. As previously mentioned, data entry staff only enter the designated facility's copy of the manifest. Without matching or reconciling both manifest copies, the department cannot ensure that all wastes are being properly managed. Hazardous Waste Division officials said when the designated facility copy is received, it could be compared to the generator copy if the division had a larger staff.

In addition, data entry is very time consuming and can lead to keying errors. The computer system generates error reports, when requested, to detect keying errors. However, officials said error reports are not generated very often. Since the system is not receiving daily error reports, this could result in an accumulation of errors that could take considerable time to correct.

**The division's manifest system has had a backlog since 1990.** In February of 1995, the Hazardous Waste Division's manifest system had a one-year backlog. Data entry staff were just beginning to enter manifests from 1994. Division officials said the backlog is a result of an inadequate number of data entry personnel. However, with this backlog, two problems could occur:

- ♦ missing shipments are harder to track down; and
- ♦ current information on manifests is not available because manifests are not in the system.

**The Hazardous Waste Division relies on self-reporting measures of generators to detect missing manifests.** Follow-up procedures are performed when a generator notifies the division in writing that a hazardous waste shipment did not arrive at its intended destination. A generator should notify the division within 45 days. However, the division has no means of independently verifying whether wastes have been received by a treatment, storage, or disposal facility without being notified by the generator. In the event that a generator does not notify the division, over a year could elapse from the shipment date until the division can make follow-up inquiries because of the substantial backlog. It could take even longer before a discrepancy is completely resolved.

Any deterrent effect on illegal dumping of hazardous waste is diminished when the division does not make a timely investigation of suspect shipments. The result could be an increase in potential hazardous waste sites. Hazardous Waste Division officials did not know exactly how many hazardous waste shipments were missing. They said the division receives an average of six to eight reports on missing hazardous waste shipments per year from generators.

**The division's process to monitor the manifest system is insufficient to detect manifest errors.** Division officials said that of the approximately 1,000 manifests received daily, one staff member briefly reviews a few for obvious errors such as missing authorizing signatures or waste codes. During the data entry process, data entry staff will also check for errors on the manifest forms they are entering into the computer system. However, only the obvious errors missed from the initial review process get corrected during this time.

To ensure that manifest files are being maintained, the division checks manifests during inspections of generators, transporters, and designated facilities. However, the division's low rate of inspection of these entities may not be sufficient to detect manifest errors or violations. The division's rate of inspections is discussed in more detail in Chapter Four.

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## **Recommendation**

**1. The Hazardous Waste Division should eliminate the manifest backlog and redesign the system to efficiently accomplish its original purpose of tracking hazardous waste. Some elements which must be incorporated into the revised system include:**

- ♦ **entry into the system of manifest copies received from generators and designated facilities upon receipt to allow for data accessibility, computer matching, and sorting; and**
- ♦ **institution of daily error and exception reports to permit quick identification of errors and missing manifests.**

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## **Industry Not Reporting Wastes**

### **All Annual Reports Are Not Submitted as Required**

All generators and treatment, storage, disposal, and recycle/reuse facilities are statutorily required to submit annual reports to DEQ by March 1 of every year. These reports detail their hazardous waste activities for the previous calendar year. The annual report is used because it captures 1) waste that is imported, exported, and generated in Louisiana; and 2) waste that is generated and managed at facilities when no manifest is required. Hazardous Waste Division officials said the annual reports in addition to the manifest system account for all hazardous waste generated, treated, stored, or disposed in Louisiana. According to division officials, generators and treatment, storage, disposal, and recycle/reuse facilities account for more than 98 percent of the hazardous waste generated and managed in the state.

The division verifies this information by comparing the data from the annual reports received from generators to the data from the reports received from treatment, storage, disposal, and recycle/reuse facilities. Division officials said any discrepancies between the annual reports are followed up by the division. However, most of the data contained in the annual reports should match since generators often use the data from manifest copies received from designated facilities to compile their annual reports. Therefore, the comparisons are not of independently generated data. Consequently, verifying self-reported data by comparing annual reports to detect inconsistencies has limited value.

**Over one-third of all annual reports from generators that were to have been submitted for calendar year 1994 have not been received.** Hazardous Waste Division officials said that after having mailed notifications, 38 percent of all registered class one generators did not submit an annual report detailing their hazardous waste activities for calendar year 1994. Based on this fact, the total amount of all hazardous waste generated in the state in 1994 cannot be readily determined. DEQ officials contend that most class one generators shipped their waste to treatment, storage, disposal, and recycle/reuse facilities who submitted all of their annual reports. Therefore, they conclude that the majority of the waste has been accounted. However, if DEQ's practice is to reconcile annual reports of generators and treatment, storage, disposal, and recycle/reuse facilities, DEQ cannot ensure that waste generated is accurately reported, since all generators are not submitting their reports.

Exhibit 3-2 on page 32 summarizes the number of annual reports received and those that remain unaccounted for calendar year 1994. The division was able to identify why some of the generators did not submit annual reports. Some of the reasons why some annual reports were not received include returned mail (generators presumed no longer in business), generator certified by the department as being closed, or the generator informed the division that it did not generate any hazardous waste for the calendar year. Hazardous Waste Division officials said that the names of those large and small quantity generators who did not submit annual reports were given to the division's enforcement section. The section will attempt to determine why an annual report was not submitted. As a result of this effort, some generators have since submitted reports.

**Exhibit 3-2**  
**Annual Hazardous Waste Reports Submitted**  
**and Not Submitted to the Department**  
**for Calendar Year 1994**

Characteristic	Class One Generators	Class Two and Class Three Generators
Total number that did submit report	292	3,189
Total number that did not submit report	206	3,803
Number that did not submit report - reason identified	16	1,073
Number that did not submit report - <u>reason not identified</u>	<b>190</b>	<b>2,730</b>

Source: Prepared by legislative auditor's staff from information provided by Louisiana Department of Environmental Quality.

### Recommendation

1. To better determine the amount of hazardous waste generated in the state, the Department of Environmental Quality should make every effort to ensure that all facilities submit their annual reports as required.

### Manifest Processing Technology

#### Available Computer Technology Could Process Manifests Efficiently and Effectively

Computer technology and programs used by the Hazardous Waste Division to gather and process the annual reports of generators and designated facilities could be modified to be used in the processing of manifests. To show the extent to which electronic transmission of data is currently being used, DEQ reported that 52 percent of all the annual reports received by the department for calendar year 1994 was submitted electronically. This represents approximately 30 percent of the state's hazardous waste activity. Even though a software

package specifically designed for the electronic submission of manifests has not yet been developed, the development of such a capability would greatly benefit the department by providing easy access to up-to-date information on missing manifests.

According to division officials, the most efficient way to handle the large number of manifests received daily would be to have all generators and designated facilities send their manifest data electronically via an on-line method. However, realizing that not all generators have the computer capability for electronic submittal of manifests, division officials said that a combination of optical scanning and electronic submission of manifests would be the optimum method to process manifests. A paper copy of the manifest would still have to be used by transporters to fulfill transportation requirements by the Department of Public Safety.





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# Chapter Four: Regulatory Program

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## Chapter Conclusions

The Department of Environmental Quality has followed established and approved federal procedures for regulating companies that produce and manage hazardous waste. For federal fiscal year 1994, the Environmental Protection Agency concluded that DEQ had met or exceeded all of its commitments regarding inspection, permitting, and enforcement activities.

However, we found the following deficiencies in the program: the low rate of inspections does not ensure compliance with state laws and regulations; officials cannot ensure that complaints are investigated; and the practice of settling penalties for less than what is assessed decreases the deterrent effect against would-be violators.

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## Oversight by the U.S. Environmental Protection

### Environmental Protection Agency Reviews Find DEQ Meeting its Yearly Commitments

To properly manage hazardous wastes, the Hazardous Waste Division regulates generators, transporters, and facilities that treat, store, or dispose of hazardous waste. Regulatory activities include permitting treatment, storage, and disposal facilities; registering all generators and transporters of hazardous waste; inspecting generators and treatment, storage, and disposal facilities; enforcing regulations when violations are detected to bring facilities back into compliance; and investigating complaints. Inspections are conducted to verify compliance with federal or state standards and enforcement actions are taken when violations of hazardous waste regulations are detected.

The division's annual regulatory activities depend primarily on commitments established in the state's annual "Resource Conservation and Recovery Act Grant Workplan." Workplan commitments include activities related to inspecting facilities, permitting facilities, and enforcing compliance at facilities.

These commitments are negotiated annually with Environmental Protection Agency, Region Six officials. EPA conducts midyear and end-of-year evaluations of the state's Hazardous Waste Program to determine the extent to which the program is meeting its annual workplan commitments.

**EPA's review showed that the department was in compliance with federal regulatory standards.** In its end-of-year review of Louisiana's Hazardous Waste Program for federal fiscal year 1994, EPA concluded that the Hazardous Waste Division had followed established and approved procedures for regulating companies that produce and manage hazardous waste. Furthermore, EPA concluded that the Hazardous Waste Division had met, or exceeded, all of its commitments regarding inspection, permitting, and enforcement activities.

Inspections, particularly compliance evaluation inspections, made up over half of all DEQ's annual commitments for federal fiscal year 1994. Based on the agreement between DEQ and EPA for federal fiscal year 1994, the Hazardous Waste Division targeted 87 compliance evaluation inspections and performed 132. Compliance evaluation inspections are the most broad based type of inspections that the division performs and are designed to detect a wide variety of regulatory violations.

**EPA's end-of-year review found that DEQ generally complied with federal requirements when issuing or denying permits to facilities that treat, store, or dispose of hazardous waste.** The state has 78 permitted treatment, storage, and/or disposal facilities in operation of which 55 receive hazardous wastes regulated under the Resource Conservation and Recovery Act. The remaining 23 treatment, storage, or disposal facilities receive other hazardous wastes not regulated by the federal Resource Conservation and Recovery Act. Appendix A lists the names and parishes in which these facilities are located. In federal fiscal year 1994, the Hazardous Waste Division committed to issue or deny six hazardous waste permits (operating, modifications, closure, post-closure). The division exceeded this commitment by one--issuing six permits and denying one. Although EPA's review concluded that DEQ's Hazardous Waste Program generally met federal requirements, we found inadequacies in the following areas: rate of inspections, handling of complaints, timeliness in processing enforcement actions, and penalty settlement practices.

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## Regulatory Inadequacies

### DEQ Is Inspecting Only a Small Percentage of Generators

For federal fiscal year 1994, the Hazardous Waste Division conducted inspections (compliance evaluation inspections, general inspections, complaint inspections, follow-up inspections, sampling efforts, certifications of closure, and emergency response inspections) at 143 class one generators. Class one generators are those generators that produce over 1,000 kilograms (2,200 lbs) of hazardous waste per month. For this same time period, the department reported that 553 class one generators existed. Consequently, we calculated that only 25.9 percent of all large quantity generators were inspected in 1994. Division officials said once a generator is inspected, it may not be re-inspected for a few years.

The rate of conducting inspections is less for class two and class three generators. For federal fiscal year 1994, the Hazardous Waste Division inspected only 44 of the 1,169, or 3.8 percent, of class two generators. During this same period, 86 of the 6,191, or 1.4 percent, of class three generators were inspected. According to DEQ officials, class three generators are usually inspected as a result of a complaint.

Because of the large number of class two and class three generators, their collective potential to harm the public and the environment by mismanaging hazardous waste is significant. For example, class two generators are defined as those that produce between 100 and 1,000 kilograms of hazardous waste per month. The amount of hazardous waste that could be produced by the 1,169 class two generators in the state ranges from 257,000 to 2.57 million pounds of hazardous waste each month.

Hazardous Waste Division officials said that generators are more likely than treatment, storage, or disposal facilities to violate hazardous waste regulations. According to these officials, the intensive monitoring of treatment, storage, or disposal facilities has increased their awareness of and improved their compliance with hazardous waste regulations. However, because generators have not been monitored as frequently as treatment, storage, or disposal facilities, they may not know of or follow the required procedures for handling hazardous waste.

Division officials said they would not be able to inspect all of the generators in the state even if they had additional inspectors. They attribute this to new regulations requiring a more thorough facility inspection and many more checklists to be completed. This increased time required to conduct inspections drives the number of inspections down. We recognize that it is not practical for the division to inspect all generators in a year. However, if DEQ increases the number of inspections (from the current level), particularly for class two and class three generators, it would better ensure generators' compliance with hazardous waste regulations.

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### **Recommendation**

- 1. Given the inspection rates for class two and class three generators and their potential for harm, the Department of Environmental Quality should examine the possibility of developing a schedule for monitoring these generators, thereby increasing their awareness of and compliance with hazardous waste regulations.**

### **DEQ Cannot Ensure That All Complaints Are Investigated**

Occasionally, DEQ headquarters and field offices receive complaints from citizens about suspected illegal hazardous waste activities. Complaints may be made by any person, including someone who works for a firm that handles hazardous waste. Louisiana Administrative Code (LAC) 33:V.107.B requires the Hazardous Waste Division to initiate a complaint investigation within seven days of having received a complaint. There is no time limit as to when it must be completed once the investigation has started. However, once the investigation is completed, department policy dictates that a written response be mailed to the complainant, if that information is available, detailing any findings resulting from the inspection of the complaint.

We conducted a file review of all complaint inspections from October 1, 1993, through September 30, 1994 (federal fiscal year 1994). We reviewed 95 files for this time period. Our objective was to determine the level of compliance of the Hazardous Waste Division Enforcement Section in meeting the seven day inspection requirement. The complaints we reviewed included allegations of improper disposal of wastes, improper storage of wastes, and chemical spills. Results of the file review are summarized in Exhibit 4-1 below.

**Exhibit 4-1**  
**Characteristics of Complaint Inspection Report File Review**  
**for Federal Fiscal Year 1994**

Characteristic (Not exclusive of each other)	Number of Files Reviewed	Files With Characteristic	Percent
Dates of complaint or inspection not documented	95	24	25.3%
Inspections with date information which exceeded the seven day time requirement	71	20	28.2%
Inspection reports not reviewed by superiors	95	24	25.3%

**Source:** Prepared by legislative auditor's staff from Enforcement Section file review.

**DEQ's complaint handling system does not ensure that all complaints are resolved properly.** DEQ cannot determine whether all complaints received by the field offices are inspected. Hazardous Waste Division Enforcement officials said that complaints are logged at headquarters only after headquarters receives a complaint inspection report from the field offices. Field offices complete complaint inspection reports after a complaint has been investigated. The system as it currently operates could allow the field offices to receive a complaint and investigate it at a much later time, or not at all, without any knowledge by headquarters. Enforcement officials said DEQ headquarters has no way of knowing whether the field offices are inspecting all complaints.

**In 25 percent of all files reviewed, the date that the complaint was received and investigated was not documented.** Only 71 of the 95 files, or 75 percent, had documentation showing the dates the complaints were received and inspected. Therefore, we reviewed only 71 files for timeliness on meeting the seven day response requirement. This lack of documentation on the remaining 24 complaint investigations could be attributed to the fact that not all complaint inspections were documented on a uniform complaint inspection form. Hazardous Waste Division Enforcement officials said they are developing a uniform complaint inspection form which will be used by all inspectors.

**More than one-quarter of all complaints reviewed did not meet the seven day timeframe for inspection.** Of the 71 complaints with complete documentation, 20 took more than seven days to investigate. These 20 complaints averaged 16.8 days to investigate. The remaining 51 complaints that were investigated within the seven day time requirement averaged 2.5 days. Timeliness in conducting investigations is important because evidence can deteriorate over time thus leading to fewer violation detections.

**One-quarter of all inspection reports were not reviewed by Hazardous Waste Division Enforcement superiors.** At the end of every complaint inspection report, there is a space reserved for the signature of Enforcement superiors, or other division official, as proof that the report was reviewed. Of all files reviewed, 25.3 percent were not signed as having supervisory review. The absence of this oversight could also attribute to the lack of date information not found on the complaint inspection form.

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## **Recommendations**

- 1. The Department of Environmental Quality should require regional offices to maintain a complaint log and immediately submit all complaints to headquarters upon receipt as proof of the date they were actually received.**

2. **The Department of Environmental Quality should require regional offices to submit all completed complaint inspections to headquarters so that the date of the investigation can be matched to the date when the complaint was received to ensure that all complaints are being investigated timely.**
3. **To ensure that all inspectors are using a uniform complaint inspection form, the Department of Environmental Quality should immediately finalize its uniform complaint inspection form.**
4. **The Department of Environmental Quality should require appropriate review of all complaint inspections.**

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### **Problems in Enforcing Penalties**

#### **Penalty Assessments Are Processed Untimely**

EPA's 1994 end-of-year report showed that 36 percent of all penalty assessments were processed untimely. An enforcement action is considered untimely when it does not reach certain milestones (for example, referral from DEQ to a judicial authority) within a specified timeframe as outlined in the EPA Enforcement Response Policy. The policy allows states up to 135 days to issue an enforcement action from the date of inspection.

Penalty assessments are the most severe type of enforcement action issued by the department. The other two enforcement actions most commonly issued by the department are compliance orders and notices of violation. Penalty assessments are normally issued to high priority violators and medium priority violators with multiple violations as a means to detract from any economic benefit gained by them while operating out of compliance. High priority violators merit the most stringent and immediate enforcement action since they pose the greatest risk to the environment and human health than the other classification of violators--medium and low priority violators.

Timeliness in processing enforcement actions shows the regulated community the department's commitment in enforcing state and federal environmental regulations. Exhibit 4-2 on page 42 shows the results from the last three end-of-year reviews by EPA of DEQ's timeliness in processing penalty assessments.

**Exhibit 4-2**  
**Summary of Penalty Assessments Processed by**  
**DEQ for High Priority Violators**  
**for Federal Fiscal Years 1992-1994**

	1992	1993	1994
Total number of high priority violators addressed with penalty assessments	41	25	11
Number of penalty assessments addressed timely	20	19	7
Number of penalty assessments addressed untimely	21	6	4
Percent of penalty assessments addressed untimely	51.2%	24.0%	36.4%

**Source:** Table prepared by legislative auditor's staff from information provided by the EPA end-of-year reports for federal fiscal years 1992-1994.

### **DEQ Penalty Settlement Practices and EPA Policy**

DEQ officials said in the interest of settling claims and to avoid the expense and effort involved in litigation, the department downwardly adjusts penalties as a settlement offer before violations are brought to trial. Penalties are considered to be downwardly adjusted when the department settles for less than what was initially assessed.

The Resource Conservation and Recovery Act Civil Penalty Policy says that state hazardous waste programs can adjust penalty assessments downwardly in certain situations. However, EPA said that downwardly adjusting penalty assessments may result in regulated firms having further grounds for taking their environmental responsibilities lightly. DEQ officials said the Civil Penalty Policy is a policy statement and is not a requirement. Therefore, DEQ does not have to strictly follow the policy. DEQ officials also said they did not want to suddenly start following the policy because it would appear arbitrary to industry.

EPA enforcement policy allows states to accept environmental projects, called Supplemental Environmental Projects, from violators in lieu of a monetary penalty. Supplemental Environmental Projects are projects that the violator would conduct to benefit the environment and local community. DEQ officials said, at times, the cost of the Supplemental Environmental Project is greater than the actual



amount of the negated part of the penalty. DEQ officials could not provide us with a dollar figure on the offers for Supplemental Environmental Projects received from violators since the offers have yet to be finalized. Exhibit 4-3 below shows the extent that total penalty assessment dollars have been downwardly adjusted.

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**Exhibit 4-3**  
**Dollar Amount of Penalties Assessed and Settled by DEQ**  
**for State Fiscal Years 1991-1995**  
**(as of June 30, 1995)**

State Fiscal Year	Total Amount Assessed	Amount Still Contested	Amount Initially Assessed and Later Settled	Actual Settlement	Percent Downwardly Adjusted
1991	\$382,805	\$110,750	\$272,055	\$171,585	36.9%
1992	\$624,016	\$389,899	\$234,119	\$140,810	39.9%
1993	\$561,239	\$340,895	\$220,344	\$120,709	45.2%
1994	\$239,217**	\$198,987**	\$40,230	\$27,005	32.9%
1995	\$266,818	\$220,688	\$46,130	\$46,130	0%

\*\* Excludes a one-time fine of \$1,055,144.

**Source:** Prepared by legislative auditor's staff from information provided by Louisiana Department of Environmental Quality.

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Violators can legally operate out of compliance for the violation they are contesting if they are contesting whether they were in violation of environmental regulations. EPA recognizes this and allows state environmental regulatory agencies to issue daily penalty assessments for each day that a facility operates out of compliance. Violators would be liable for the total penalties assessed if the violation is upheld by the courts. Otherwise, the initial penalty assessment and those subsequently assessed will be dropped. However, DEQ has not implemented these enforcement measures.

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**Recommendation**

1. **The Department of Environmental Quality should implement procedures to ensure that enforcement actions are processed timely in accordance with EPA standards.**

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**Matter for Legislative Consideration**

1. **The legislature may wish to consider enacting statutory requirements in accordance with EPA policies to require the Department of Environmental Quality to issue multi-day penalties to bring facilities operating out of compliance back into compliance with environmental regulatory standards.**

# Appendix A

List of Top Fifty  
Treatment, Storage, Disposal,  
and  
Recycle/Reuse Facilities  
by the Amount of  
Hazardous Waste Managed

## Appendix A: List of Top Fifty Treatment, Storage, Disposal, and Recycle/Reuse Facilities by the Amount of Hazardous Waste Managed

Parish	City	TSD Facility	Amount (in tons)
Calcasieu	Lake Charles	Citgo Petroleum Corporation	12,612,001
Plaquemines	Belle Chase	BP Oil Company	3,787,000
Jefferson	Waggaman	Cytec Industries	3,359,148
St. Charles	Taft	Union Carbide Corporation	3,291,182
Ascension	Geismer	Rubicon, Inc.	1,405,341
St. Charles	Luling	Monsanto Company	1,019,275
St. John the Baptist	LaPlace	E. I. Dupont De Nemours & Company	891,607
Calcasieu	Sulphur	Chemical Waste Management, Inc.	685,820
Ascension	Geismer	BASF Corporation	529,317
Calcasieu	Westlake	Louisiana Pigment Company	432,504
Ouachita	Sterlington	Angus Chemical Company	111,983
Calcasieu	Westlake	Cecos International	90,304
St. Mary	Amelia	Marine Shale Processors	79,285
Acadia	Rayne	Laidlaw Environmental Services, Inc.	68,827
Iberville	Plaquemine	Dow Chemical Company- LA Division	45,462
East Baton Rouge	Baton Rouge	Rollins Environmental Services	39,435
Iberville	Plaquemine	Rollins Environmental Services of LA	37,605
Iberville	Plaquemine	Georgia Gulf Corp.-Plaquemine Facility	36,451
Calcasieu	Westlake	PPG Industries	24,032
St. Charles	Norco	Shell Chemical Company	18,042
St. Bernard	Chalmette	Mobil Oil Corporation	16,800
East Baton Rouge	Baton Rouge	Rhone-Poulenc	14,968
East Baton Rouge	Baton Rouge	Schuylkill Metals Corporation	13,877
Calcasieu	Westlake	Olin Corporation	11,725
East Baton Rouge	Baton Rouge	Exxon Chemical Co.-Baton Rouge Plastics	9,267
Iberville	St. Gabriel	CIBA Geigy Corporation	8,897
Rapides	Alexandria	AFCO Industries, Inc.	4,865
Ascension	Geismer	Vulcan Chemicals	4,453
Calcasieu	Lake Charles	ECOVA Corporation	3,946
Lafayette	Lafayette	Catalyst Recovery of Louisiana	3,067
St. Charles	Taft	Witco Corporation	2,839
St. John the Baptist	Garyville	Marathon Oil Company	2,345
Caddo	Shreveport	UOP- Shreveport Plant	1,123
St. Charles	Norco	Shell Oil Company	8,777
Beauregard	DeRidder	Westvaco Corporation	490
Plaquemines	Belle Chase	Chevron Chemical Company	134
Grant	Colfax	Laidlaw Environmental	134
Lafayette	Lafayette	Performance Medical Group	95
East Baton Rouge	Baton Rouge	Exxon Company	87
Iberville	St. Gabriel	Pioneer Chlor Alkali Company	29
Sabine	Zwolle	Zwolle Rail Car Company	23
Caddo	Shreveport	United Bumper Exchange	19

Parish	City	TSD Facility	Amount (in tons)
Bossier	Bossier City	Custom Labels	16
Webster	Doyline	Louisiana Army Ammunition Plant	11
Orleans	New Orleans	Martin Marietta	7
St. Mary	Amelia	J. Ray Mcdermott, Inc. Fab	4
St. Mary	Amelia	J. Ray Mcdermot, Inc.	4
Tangipahoa	Hammond	Lamp Recyclers of Louisiana, Inc.	4
Lafourche	Lockport	Trinity Marine Group	3
Beauregard	DeRidder	Boise Cascade	3

# Appendix B

List of Top Fifty  
Large Quantity Generators  
by the Amount of  
Hazardous Waste Generated

## Appendix B: List of Top Fifty Large Quantity Generators by the Amount of Hazardous Waste Generated

Parish	City	Large Quantity Generator	Amount (in tons)
Calcasieu	Lake Charles	Citgo Petroleum Corporation	13,044,313
Plaquemines	Belle Chase	BP Oil Company	3,788,084
Jefferson	Waggaman	Cytec Industries	3,359,772
St. Charles	Taft	Union Carbide Corporation	3,291,643
Ascension	Geismar	Rubicon, Inc.	1,428,366
St. Charles	Luling	Monsanto Company	1,019,769
Ascension	Geismar	BASF Corporation	533,340
St. John the Baptist	LaPlace	E. I. Dupont De Nemours & Co.	471,339
Calcasieu	Westlake	Louisiana Pigment Company	433,005
Ouachita	Sterlington	Angus Chemical Company	112,110
Calcasieu	Westlake	CECOS International	89,727
Calcasieu	Lake Charles	Chemical Waste Management, Inc.	56,392
Iberville	Plaquemine	Dow Chemical Company- LA Division	45,352
Grant	Colfax	Laidlaw Environmental Services, Inc.	42,218
Iberville	Plaquemine	Georgia Gulf Corp. -Plaquemine Facility	37,469
Calcasieu	Westlake	PPG Industries	31,423
East Baton Rouge	Baton Rouge	Exxon Company	23,620
Ascension	Geismar	Shell Chemical Company	19,699
St. Bernard	Chalmette	Mobil Oil Corporation	17,461
Ouachita	Monroe	Tetco-Monroe Station	17,316
Calcasieu	Lake Charles	Vista Chemical Company	17,055
East Baton Rouge	Baton Rouge	Rollins Environmental Services	15,675
East Baton Rouge	Baton Rouge	Schuykill Metals Corporation	13,468
Calcasieu	Westlake	Olin Corporation	12,565
East Baton Rouge	Baton Rouge	Formosa Plastic Corporation	11,099
East Baton Rouge	Baton Rouge	DSI Transports	9,462
Iberville	St. Gabriel	CIBA-Geigy Corporation	9,413
East Baton Rouge	Baton Rouge	Exxon Chemical Company	9,311
St. John the Baptist	LaPlace	Bayou Steel Corporation	9,078
Calcasieu	Lake Charles	Gold Line	9,020
Acadia	Rayne	Laidlaw Environmental Services	8,272
East Baton Rouge	Baton Rouge	Exxon Chemical Americas	8,235
Red River	Westdale	Tetco-Red River Facility	7,044
East Baton Rouge	Baton Rouge	HBM River Plant	6,724
Ascension	Geismar	Vulcan Chemicals	5,464
Rapides	Alexandria	AFCO Industries, Inc.	4,876
Jefferson	Westwego	T T Coatings	4,369
Ascension	Geismar	Uniroyal Chemical Company	4,103
Calcasieu	Westlake	CECOS International	4,083
Calcasieu	Westlake	Conoco-Lake Charles Refinery	4,025
St. James	St. James	US Department of Energy	3,066
St. Charles	Taft	Witco Corporation	3,034

<b>Parish</b>	<b>City</b>	<b>Large Quantity Generator</b>	<b>Amount (in tons)</b>
St. John the Baptist	Garyville	Marathon Oil Company	3,016
St. Charles	Norco	Shell Oil Company	2,774
Iberville	Geismar	Arcadian Fertilizer	2,536
West Baton Rouge	Port Allen	Westside Galvanizing Services	1,987
East Baton Rouge	Baton Rouge	Plantation Pipe Line Company	1,980
Ascension	Geismar	Borden Chemicals and Plastics	1,571
Orleans	New Orleans	US NASA/Martin Marietta	1,421
East Baton Rouge	Baton Rouge	Browning Ferris Industries	1,371



# Appendix C

## Hazardous Waste Activities of the United States and Territories

## Appendix C: Hazardous Waste Activities of the United States and Territories

	Total Tons Generated	Total Tons Managed	Total Number of LQGs	Total Number of TSDFs	Average Waste Generated per LQG	Average Waste Managed per TSDF
Alabama	779,645	544,602	295	49	2,643	11,114
Alaska	5,534	55	75	8	74	7
Arizona	46,913	32,681	233	32	201	1,021
Arkansas	794,801	804,914	162	24	4,906	33,538
California	14,055,553	12,899,741	1,872	253	7,508	50,987
Colorado	1,079,332	743,526	146	32	7,393	23,235
Connecticut	1,169,205	87,080	441	56	2,651	1,555
Delaware	22,173	1,857	71	8	312	232
District of Columbia	628	0	15	1	42	0
Florida	213,888	134,387	438	68	488	1,976
Georgia	921,076	825,522	438	58	2,103	14,233
Guam	2,453	0	14	2	175	0
Hawaii	1,774	591	44	6	40	99
Idaho	1,255,865	935,049	57	9	22,033	103,894
Illinois	12,494,369	11,446,050	1,238	134	10,092	85,418
Indiana	1,751,572	1,972,197	683	103	2,565	19,148
Iowa	158,908	130,002	196	34	811	3,824
Kansas	3,144,665	3,202,245	297	54	10,588	59,301
Kentucky	397,488	221,701	472	42	842	5,279
Louisiana	31,715,905	31,468,974	347	67	91,400	469,686
Maine	8,651	908	148	25	58	36
Maryland	308,621	166,232	566	27	545	6,157
Massachusetts	163,037	45,607	569	32	287	1,425
Michigan	21,014,255	20,686,504	789	136	26,634	152,107
Minnesota	5,993,221	6,015,307	300	50	19,977	120,306
Mississippi	1,882,053	1,901,716	163	22	11,546	86,442
Missouri	522,922	516,407	415	91	1,260	5,675
Montana	11,282	1,695	60	9	188	188
Nebraska	90,471	45,458	96	19	942	2,393
Nevada	10,773	82,601	82	8	131	10,325
New Hampshire	17,249	0	158	2	109	0
New Jersey	17,977,002	17,557,748	3,120	158	5,762	111,125
New Mexico	176,409	165,968	60	15	2,940	11,065
New York	1,498,421	1,057,801	2,036	82	736	12,900
North Carolina	447,718	336,975	623	73	719	4,616
North Dakota	594,815	593,349	16	8	37,176	74,169
Ohio	1,739,928	1,697,197	1,524	117	1,142	14,506
Oklahoma	1,145,732	1,156,392	193	31	5,936	37,303
Oregon	1,392,152	568,633	184	11	7,566	51,694

	Total Tons Generated	Total Tons Managed	Total Number of LQGs	Total Number of TSDFs	Average Waste Generated per LQG	Average Waste Managed per TSDF
Pennsylvania	9,441,256	9,215,329	1,215	81	7,771	113,769
Puerto Rico	1,373,639	1,338,211	109	42	12,602	31,862
Rhode Island	10,169	11,118	102	19	100	585
South Carolina	310,399	1,184,248	388	25	800	47,370
South Dakota	767	0	24	3	32	0
Tennessee	33,937,638	33,996,659	518	31	65,517	1,096,666
Texas	63,435,688	52,506,535	1,286	234	49,328	224,387
Trust Territories	6,045	5,808	3	2	2,015	2,904
Utah	104,623	103,495	106	26	987	3,981
Vermont	8,337	994	82	5	102	199
Virgin Islands	2,049	90	2	1	1,025	90
Virginia	96,850	81,550	379	59	256	1,382
Washington	14,397,985	10,159,540	766	40	18,796	253,989
West Virginia	8,471,643	8,238,991	106	23	79,921	358,217
Wisconsin	622,523	94,955	605	32	1,029	2,967
Wyoming	1,316,689	520	26	5	50,642	104

# Appendix D

## Agency Response



# State of Louisiana

## Department of Environmental Quality



Edwin W. Edwards  
Governor

October 16, 1995

William A. Kucharski  
Secretary

Daniel G. Kyle, Ph.D., CPA  
Legislative Auditor  
State of Louisiana  
Post Office Box 94397  
Baton Rouge, Louisiana 70804-9397

Re: Report on Hazardous Waste Management in Louisiana

Dear Dr. Kyle:

Thank you for the opportunity to review and comment on your performance audit report entitled "Management of Hazardous Waste in Louisiana." As requested, my staff and I have reviewed the revisions to the above referenced audit report resulting from the exit conference held on October 4, 1995. The comments given below represent our concerns regarding the final audit report.

I do not agree with the finding that the Inactive and Abandoned Sites Division should develop a statewide survey in order to discover new abandoned hazardous waste sites. This exercise would utilize valuable resources which could better be used actually assessing the 561 potential sites that we already know about. Most of the sites that could seriously affect public health and the environment have already been discovered and are in our system. Most of the legitimate new sites that we are discovering today are sites that were viable operations that go out of business. No survey will detect this type of site.

I agree that a prioritization system is a necessary tool in the effective management of the Inactive and Abandoned Sites Program. That division has been developing a tier classification system throughout the last year that will enable us to generally prioritize **confirmed** sites. This agency is still working on internal problems with the system and expect to have it completed by the end of the year. At that time, we will begin to implement the system to the extent that we can with available staff. We do not feel that it would be a wise use of resources to formally prioritize **potential** sites. It would take as much manpower to develop a prioritization scheme and implement it for each site as it would to actually do the assessment, itself. We would prefer to pursue additional resources to enhance the assessment staff and have them assess the potential site universe quicker.

I agree with the finding that the Inactive and Abandoned Sites Division has not developed regulations as required by statute and is in need of doing so. This issue has not been taken lightly, nor has it been taken for granted. An extensive set of regulations has been written based on the Federal Superfund program, as it currently exists, as well as the level of effort and funding necessary to properly operate this program. However, it is apparent that the Superfund program will undergo significant changes within the next year and it would be counterproductive to finalize our regulations until those changes can be considered. Also, the level of resources necessary to implement the regulations that we have written has never been achieved. The division continues to seek a solution to this issue and hopes to pare down those regulations to a final product that we can afford to implement. This was reported to the legislature in IASD's 1993-94 legislative report and will be included in our 1994-95 report to be published shortly.

OFFICE OF THE SECRETARY P.O. BOX 82263 BATON ROUGE, LOUISIANA 70884-2263

TELEPHONE (504) 765-0741 FAX (504) 765-0746

AN EQUAL OPPORTUNITY EMPLOYER



Dr. Daniel G. Kyle  
October 16, 1995  
Page 2

As pointed out in the report, we are reviewing the manifest system with the intention of making it more comprehensive and efficient. This agency agrees with the findings surrounding the data entry backlog, keeping in mind that the data entry phase is only a portion of the "tracking" process. Comparison of manifest data to information contained in the Environmental Protection Agency's (EPA's) RCRIS computer system for specific generators and designated waste handling facilities is also a part of waste tracking. We hope to be able to integrate the various pieces of information to make tracking a more manageable task.

Annual report submission is also a key component to waste management, but more in terms of being able to provide information to the general public. While we are currently able to provide data in various formats, and in response to the numerous inquiries that we receive, facilities are not required to submit annual reports if their waste generation for the year is zero. Facilities in Louisiana that treat, store, dispose, reuse or recycle waste account for more than 98% of the waste generated and managed in the state. Annual report data is used for data gathering because many facilities manage their waste on site - which does not require manifest usage. This factor skews the data analysis when comparing numbers of facilities in the waste generation and management universe to the numbers of annual reports received. Requiring all facilities to submit annual reports will require additional resources from us, but will ensure that non-reporting facilities can be investigated in a more timely fashion.

I agree that steps should be taken to provide assistance to the small quantity generators, in terms of increasing their awareness of the regulations. In both of the EPA-State Meetings (April and August 1995), as well as in recent grant negotiations with EPA enforcement staff, we have made suggestions for outreach awareness programs to assist **all** hazardous waste generators in achieving environmental compliance. We will continue to work with EPA in the development of such a program. Additional inspectors specifically assigned to a small quantity generator program is another possibility that could provide a greater compliance monitoring presence across the state.

As a result of discussions during the data collection phase of the audit, we have instituted new policies in the management of complaint investigations. These changes are consistent with your recommendations and should assist us in providing better services to both complainants and the regulated facilities.

As the EPA has continued to authorize the state program for administration of the hazardous waste program, the amount of work required during an inspection has also increased. New regulations require additional checklists to be completed as each unit within the facility is inspected. The increased time and effort required to conduct these inspections has reduced the numbers of facilities that can be inspected over the past several years.

Over the past several years, we have taken steps to ensure that larger percentages of our enforcement actions have been processed timely and in accordance with EPA standards. While timeliness is certainly one important goal, preparation of complete, well documented, and defensible enforcement actions is more important. EPA program reviews have provided documentation that Louisiana compliance monitoring staff excel in the preparation of such actions. We will turn our efforts toward improving timeliness while sustaining our other performance levels.

Dr. Daniel G. Kyle  
October 16, 1995  
Page 3

As part of the Total Quality Management (TQM) process, this agency is developing guidelines for the standardization of enforcement actions across all divisions. One of the findings of the Quality Action Team (QAT) was that penalties should not be settled for less than face value. We are hopeful that these guidelines will assist us in reducing the number of actions that are appealed. We are confident that they will provide our programs with needed strength to bring violators back in to compliance in a timely manner. A recommendation will be forwarded to the Cross Media TQM Board for the development of guidelines for issuance of multi-day penalties.

In summary, my staff and I fully appreciate the efforts of your staff in the preparation of this valuable report. When we entered into this process our staffs formed a partnership. Their efforts have allowed us to step back and take a good look at our internal processes. It is not always easy for an agency such as mine to view itself with such objectivity, and we could not have accomplished this without your staff.

On behalf of myself and the members of my staff, it has been a pleasure to work with the members of your performance audit team on this project.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. A. Kucharski', with a long horizontal flourish extending to the right.

William A. Kucharski  
Secretary

WAK:mdv