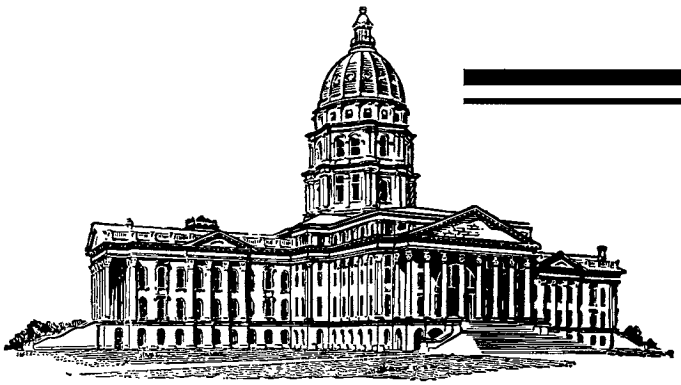

PERFORMANCE AUDIT REPORT

Hazardous Waste Regulation in Kansas

A Report to the Legislative Post Audit Committee
By the Legislative Division of Post Audit
State of Kansas
April 1989

89-40

Legislative Post Audit Committee

Legislative Division of Post Audit

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PERFORMANCE AUDIT REPORT

HAZARDOUS WASTE REGULATION IN KANSAS

OBTAINING AUDIT INFORMATION

This audit was conducted by Ron Green, Senior Auditor, and Rakesh Mohan and Tom Vittitow, Auditors, of the Division's staff. If you need any additional information about the audit's findings, please contact Mr. Green at the Division's offices.

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HAZARDOUS WASTE REGULATION IN KANSAS

Summary of Legislative Post Audit's Findings

This audit is part of a joint audit project organized by the National State Auditors Association. Each participating state is conducting an audit of its hazardous waste regulatory program, and a summary report will be prepared.

Has the State established adequate procedures to regulate companies that generate, store, treat, or dispose of hazardous wastes, and are those procedures being followed? The Department of Health and Environment's regulatory procedures are in compliance with federal and State legal requirements, but several aspects of the program are not being managed adequately. The Department did not have an adequate system for regularly inspecting all companies, or for handling complaints regarding hazardous waste. In addition, the Environmental Protection Agency recently criticized the Department's handling of some companies that had violated hazardous waste regulations.

Has the State established adequate procedures to reduce the quantity of hazardous waste, and are those procedures being followed? The State does not have an established program to minimize production of hazardous waste, but the Department is in the process of developing such a plan. The Department was recently awarded a three-year, $320,000 grant from the Environmental Protection Agency to develop a waste minimization program. The program is a joint effort of the Department, the University of Kansas, and Kansas State University.

Has the State established an adequate system for monitoring the movement of hazardous waste, and is it being followed? Kansas has adopted the federal requirements for monitoring the movement of hazardous waste, and the system appears to be working as intended. However, the Department has not had adequate procedures for tracking and resolving discrepancies concerning hazardous waste shipments. Discrepancies discovered by Department inspectors were not resolved on a timely basis, and were not adequately documented in the official files.

This audit includes several recommendations for improving the Kansas hazardous waste regulatory program. We would be happy to discuss these recommendations or any other items in the report with any legislative committees, individual legislators, or other State officials.

Meredith Williams
Legislative Post Auditor

HAZARDOUS WASTE REGULATION IN KANSAS

Industrial firms, small businesses, and government installations may generate wastes that could cause injury or death, or could damage or pollute land, air, or water. These wastes are considered hazardous, and they are regulated by federal and state public health and environmental safety laws.

The regulation of hazardous waste is a matter of concern in Kansas and throughout the nation. An accidental spill or illegal disposal of hazardous waste could result in severe damage to the environment or to persons exposed to the waste. Because of these concerns, the National State Auditors Association recently chose hazardous and toxic waste regulation as its first joint audit topic. Each participating state will conduct an audit of its hazardous waste regulatory program, and a summary report will be prepared. The final audit results will be presented at the June 1989 meeting of the National State Auditors Association.

The Legislative Post Audit Committee directed us to participate in this multi-state audit effort. This audit addresses the following questions:

1. **Has the State established adequate procedures to regulate companies that generate, store, treat, or dispose of hazardous wastes, and are those procedures being followed?**

2. **Has the State established adequate procedures to reduce the quantity of hazardous waste, and are those procedures being followed?**

3. **Has the State established an adequate system for monitoring the movement of hazardous waste, and is it being followed?**

To answer these questions, we reviewed State laws and regulations concerning hazardous waste. We interviewed State officials at the Department of Health and Environment, and federal officials at the regional office of the Environmental Protection Agency. We examined the Department's policies and procedures, and relied to a large extent on recent program reviews of Kansas' program conducted by Environmental Protection Agency staff. We specifically reviewed the Department's procedures for handling complaints, issuing permits, and investigating discrepancies in hazardous waste shipments, but we did not test for evidence of abuse or illegal acts. We also reviewed the Department's regulation of companies that produce smaller amounts of hazardous waste, and accompanied Department inspectors on several inspections.

In general, we found that State procedures for regulating hazardous wastes were in compliance with federal and State legal standards, and that those procedures were generally being followed. On the other hand, the Department's procedures are not adequate in areas such as inspecting all hazardous waste producers on a regular basis, tracking and resolving complaints concerning hazardous waste, and taking actions

when companies violate the regulations. The State does not have an established program to minimize production of hazardous waste, but the Department is in the process of developing such a plan. The State's system for monitoring the movement of hazardous waste generally is working as intended, but it does not have an adequate system for tracking and resolving discrepancies in hazardous waste shipments. These and other findings will be discussed in more detail following an overview of the hazardous waste management system.

Overview of the Hazardous Waste Management System

The regulation of hazardous waste in Kansas is a joint effort by the federal Environmental Protection Agency and the Kansas Department of Health and Environment. The Environmental Protection Agency provides most of the funds to support the program, and conducts annual reviews to determine whether Kansas' regulatory program is in compliance with federal standards and with the written agreement between the two agencies. The Department manages the regulatory program, which includes issuing permits, conducting inspections, responding to complaints, and registering transporters of hazardous waste. The following sections provide general information about the regulatory process in Kansas.

Total Quantity of Hazardous Waste Generated

The United States produced about 265 million metric tons of hazardous wastes in 1983. Hazardous waste produced by Kansas industries represented about one percent of the total.

According to Department records, 1.3 million tons of hazardous waste were generated in Kansas in 1985. (At the time of the audit, the Department was in the process of compiling summary data for 1987). As shown below, the quantity of hazardous waste generated in Kansas went down each year from 1981 through 1985.

Quantity of Hazardous Waste Generated in Kansas

Year	Total Quantity In Tons
1981	3.2 million
1982	3.0 million
1983	2.6 million
1984	2.5 million
1985	1.3 million

According to the Department, the major factors causing this decline were increased use of recycling, changes in raw materials or processes, and reclassification of some wastes previously classified as hazardous.

In 1985, about 98 percent of the waste was generated by one firm, Vulcan Materials Company, of Wichita. This company not only generates hazardous waste such as chlorinated solvents and residues from manufacturing processes, it also stores, treats, and disposes of the waste under permits issued by the Department.

Some of the more common producers of hazardous waste are chemical manufacturers, vehicle maintenance shops, dry cleaners, furniture and wood manufacturing and refinishing firms, paper manufacturers, and metal manufacturers. These industries produce hazardous wastes like acids, spent solvents, heavy metals, and cyanide.

The Department's 1985 annual report also pointed out that Kansas was a net importer of hazardous waste; about 10,700 tons were shipped out-of-State, while 19,400 tons were imported. The majority of this imported waste was used as supplementary fuel in a cement kiln in Fredonia.

After hazardous waste is generated, it may be handled in several different ways. The waste may be returned to its original form through a recycling process. It may be stored on-site by the company. It may be sent to another company that stores, treats, or disposes of the waste. (Treatment means that the chemical structure of the waste is changed to make it less hazardous. Disposal means that the waste is injected into a deep well, put into specially constructed ponds, or buried in an above-ground landfill. Since 1985, below-ground burial of hazardous waste has not been permitted.) In Kansas, nearly all hazardous waste is stored, treated, or disposed of on-site by the same company that generated it.

The Federal Government's Role in the Management of Hazardous Waste

The federal government has set minimum requirements for management of hazardous waste. In 1976, the U.S. Congress passed the Resource Conservation and Recovery Act, requiring industry to manage its hazardous wastes. The primary goals stated for the program are:

- To protect human health and the environment from the potential hazards of waste disposal
- To conserve energy and natural resources
- To reduce the amount of waste generated, including hazardous waste
- To ensure that wastes are managed in an environmentally sound manner

Federal regulations under this Act were effective in 1980. Some hazardous wastes are specifically listed in the federal regulations. Waste may also be considered hazardous if it has one of the following characteristics:

- Ignitable — can create fires under certain conditions

- Corrosive — acidic or capable of corroding metals

- Reactive — unstable under normal conditions, and can create explosions or toxic fumes, gases, and vapors when mixed with water

- Toxic — harmful or fatal when ingested or absorbed, and if disposed of on land may pollute the groundwater

Hazardous wastes may be liquids, solids, or sludges, and are most often the by-products of manufacturing processes. Hazardous wastes may cause an increase in mortality or illness, and pose a threat to human health or the environment.

In Kansas, the Environmental Protection Agency's primary regulatory role is to oversee the State's hazardous waste regulatory program. Most of the funds to support Kansas' regulatory program are provided through the Environmental Protection Agency. To administer the hazardous waste program, the State received more than $600,000 from the Environmental Protection Agency in federal fiscal year 1988. In addition, the Agency monitors the Kansas program to ensure that it is complying with federal requirements. Monitoring by the Environmental Protection Agency occurs primarily through the following steps:

- The Environmental Protection Agency's regional headquarters in Kansas City enters into joint agreements with the Department of Health and Environment. These agreements establish the minimum performance levels that the Kansas program must achieve to continue full federal authorization and funding. Performance levels are set in areas such as issuing permits, conducting inspections, and preparing plans for the closure of any companies that no longer handle hazardous waste.

- The Environmental Protection Agency conducts an annual program review and mid-year review to ensure that the Department is fulfilling the federal requirements and meeting the commitments outlined in the joint agreement.

- The Environmental Protection Agency communicates with the Department on a regular basis, particularly in difficult or controversial cases.

- Environmental Protection Agency officials occasionally accompany State inspectors on inspections of companies that handle hazardous waste.

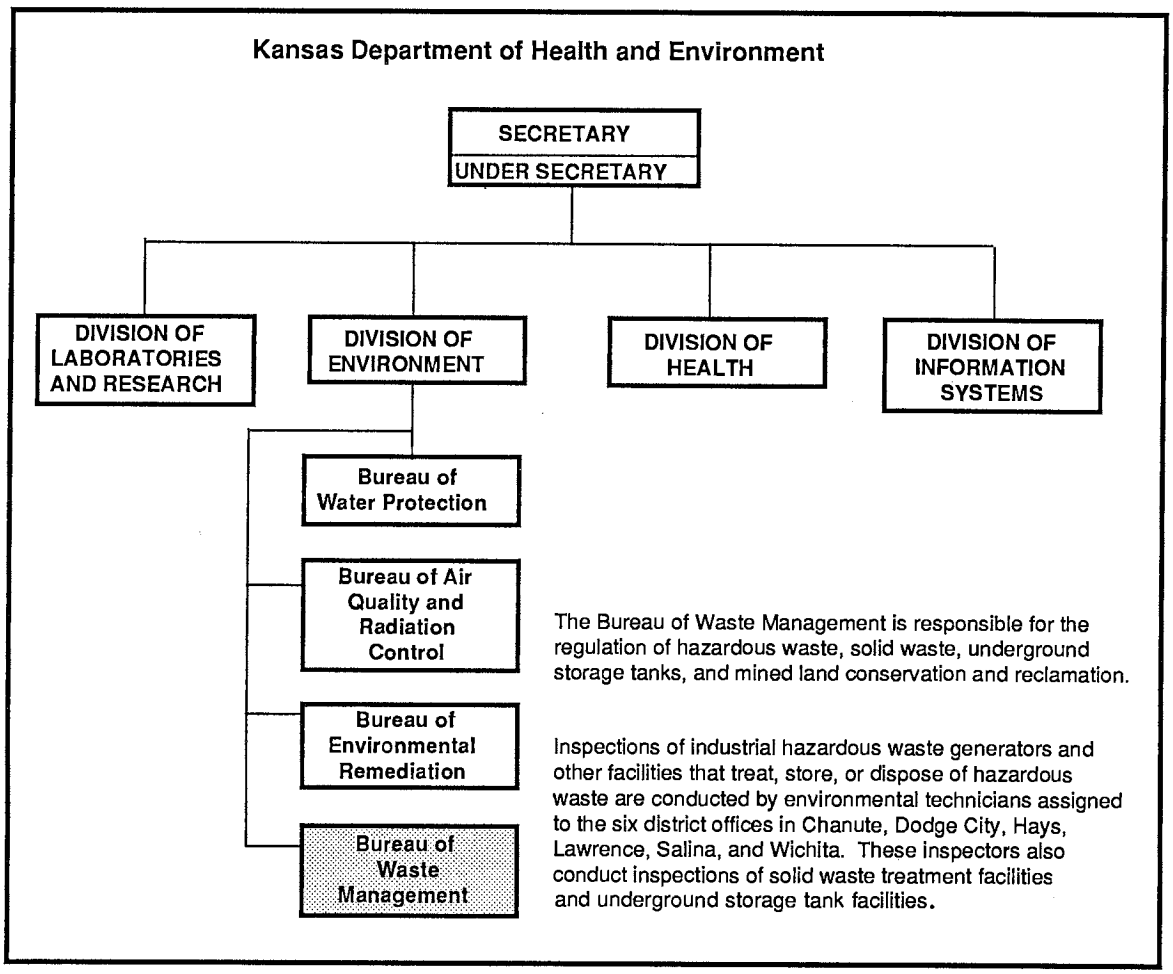
Kansas Government's Role in the Management of Hazardous Waste

The Department of Health and Environment is responsible for enforcing the federal hazardous waste program. The 1977 Kansas Legislature amended the Solid Waste Management Act of 1970 to classify certain solid wastes as hazardous. The 1977 legislation required the Secretary of Health and Environment to adopt administrative regulations governing the handling, storage, and disposal of hazardous waste. In 1979, the Legislature broadened the Secretary's authority over hazardous waste sites, and the Act was renamed the Solid and Hazardous Waste Act. In 1981, a sepa-

rate Hazardous Waste Act was enacted, which resulted in the Department of Health and Environment establishing separate regulatory programs for solid waste and hazardous waste.

The federal Resource Conservation and Recovery Act allows states to implement their own hazardous waste programs in lieu of the federal program, provided the state standards and regulations were equivalent to the federal ones. In 1984 and 1985, the Kansas Legislature made changes to the Hazardous Waste Act to provide statutory equivalency to the federal laws. The Department received final authority from the federal government to manage the program in October 1985.

The Department is responsible for monitoring and regulating hazardous waste from generation through disposal, and sometimes after disposal. The responsibility for the regulation of hazardous waste has been assigned to the Bureau of Waste Management within the Department. This Bureau also regulates solid waste, underground storage tanks, and coal production and mined land reclamation. For fiscal year 1989, the Bureau has 52 positions and a budget of nearly $5.1 million.



If a company in Kansas produces at least 25 kilograms (55 pounds) of hazardous waste per month, the company is required to obtain an identification number from the Department and to follow regulations for proper storage and disposal of the waste. Kansas law is more stringent than federal law, which requires regulation of entities that produce at least 100 kilograms of hazardous waste per month.

The Department also regulates transporters of hazardous waste. Transporters are required to register with the Department, obtain an identification number, and provide proof of adequate liability insurance. These transporters pick up packaged and labeled waste and transport it to designated facilities that treat, store, or dispose of the waste. To track transported waste, the program requires hazardous waste producers to fill out a manifest, a one-page form with copies for each of the participants in the shipment. The manifest must also be signed by the transporter and the facility receiving the hazardous waste.

Before operating a treatment, storage, or disposal facility, a company must obtain a permit and a federal identification number from the Department. The company must also provide the Department with financial assurance that all hazardous wastes will be cleaned up when the facility ceases operations. In Kansas, it is very common for a facility permitted by the Department to treat, store, or dispose of hazardous waste to be the same company that generated the waste.

To help support the State regulatory program, various monitoring fees have been established for the different types of hazardous waste operations. These fees are shown below.

Types of Firms Regulated	Annual Fees Assessed
Generators	$100 to 5,000 (based on amount produced)
Transporters	$250
Storage Facilities	$1,500
Treatment Facilities	$2,500
Disposal Facilities	$5,000 to 25,000 (based on method of disposal)

Through these monitoring fees, the Department received about $265,000 in fiscal year 1988. Department officials said that these fees, along with the $600,000 received from the Environmental Protection Agency, covered the costs of the hazardous waste regulatory program.

As of January 1989, the Department regulated more than 3,000 entities that produced at least 25 kilograms of hazardous waste monthly. At the same time, 208 transporters had registered with the Department to operate in Kansas. Additionally,

30 treatment, storage, or disposal facilities were operating in Kansas. None of the treatment or disposal facilities accepted hazardous waste from other companies; rather, they treated or disposed of waste generated only by their own companies. However, nine storage facilities were accepting waste produced by other firms.

One of the Department's most important monitoring methods is on-site inspections. Inspectors look at the facility's records, take waste samples, and assess the facility's operation. The inspectors also look at manifests and review the handling and labeling of wastes. The Department has several means to help bring a facility into compliance with the hazardous waste management laws and regulations. These steps include warning letters, administrative orders, fines, and civil or criminal actions. In federal fiscal year 1988, the Department issued five fines (for a total of $18,500) against companies that allegedly violated hazardous waste regulations.

Has the State Established Adequate Procedures to Regulate Companies that Generate, Store, Treat, or Dispose of Hazardous Wastes, And Are Those Procedures Being Followed?

According to the Environmental Protection Agency, the State has established adequate procedures to regulate companies that produce, treat, store, or dispose of hazardous waste, and for the most part, the Department of Health and Environment has followed the established procedures. However, it noted significant problems in the Department's handling of enforcement actions against companies rated as high-priority violators. The Environmental Protection Agency conducts an annual program review of the Kansas program, as well as a mid-year review. Our conclusions are based on findings from the most recent annual review, supplemented by our interviews, observations, and testwork.

The Department's regulatory procedures are in compliance with federal and State legal requirements, but several aspects of the program are not being managed adequately. For example, the Department did not have an adequate system for regularly inspecting all companies that produce hazardous waste, or for handling complaints regarding hazardous waste. These and other findings are discussed in the following sections.

The Department's Procedures Are in Compliance With Federal and State Legal Requirements, And Are Generally Being Followed

The State's statutes, regulations, and procedures for regulating companies that produce, treat, store, or dispose of hazardous waste have been approved by the Environmental Protection Agency, and meet the legal requirements of the federal program. After reviewing the Environmental Protection Agency's recent assessments of the Kansas hazardous waste program and interviewing officials who conducted the most recent program review, we concluded that the federal program reviews were reliable.

The Environmental Protection Agency's reviews showed that the Department was generally in compliance with federal standards. In its review of Kansas' hazardous waste program for federal fiscal year 1988, the Environmental Protection Agency concluded that the Department has followed nearly all established and approved procedures in regulating companies that deal with hazardous waste, and met or exceeded all its commitments regarding the number of inspections.

In addition to the inspections shown in the table on the facing page, the Department also inspected 98 companies that generated relatively small amounts of waste (less than 25 kilograms per month). These inspections are not covered by the agreement between the Department and the Environmental Protection Agency.

Inspections Conducted by the Department In Federal Fiscal Year 1988

Types of Inspections	Number of Inspections Targeted (a)	Number of Inspections Completed
Companies that Generate Hazardous Waste	100	209
Treatment, Storage, and Disposal Facilities	28	41
Non-notifiers (Companies that have not notified the Department of their hazardous waste activities)	20	88
	148	338

(a) Based on the agreement between the State and the Environmental Protection Agency.

The Department has adequate procedures for identifying companies that produce hazardous waste. Department officials have mailed letters to specific industries using addresses from various directories and conducted inspections of companies that generate small amounts of hazardous waste. One result of an inspection is to determine whether the company generates enough hazardous waste to be regulated by the State.

The Department also has prepared a *Hazardous Waste Generator's Handbook* which informs companies about State and federal requirements. It has also conducted conferences in conjunction with the University of Kansas' Continuing Education Department, spoken to various groups, and established a telephone hotline.

The number of regulated producers of hazardous waste has dramatically increased since 1984, when the State began reducing the regulatory limit of hazardous waste produced from 100 kilograms per month to 25 kilograms per month. Before the regulatory change in 1984, there were about 150 regulated companies that produced less than 1,000 kilograms of hazardous waste per month. As of January 1989, the number of regulated companies that produced less than 1,000 kilograms of hazardous waste per month was nearly 2,800.

A list of companies that produce the largest amounts of hazardous waste in Kansas can be found in Appendix A. The classification and numbers of companies that produce hazardous waste are shown in the table on page ten.

The change in regulation (lowering the threshold from 100 kilograms to 25 kilograms per month) was intended to reduce the amount of hazardous waste being improperly disposed of. Because more companies that produce hazardous waste are now being regulated, Department officials think there is less risk that the waste is being improperly dumped or buried.

Classification and Number of Hazardous Waste Generators in Kansas

Classification of Hazardous Waste Generator	Accumulation Amount	Total Number As of January 1989
1,000 kg/mo or more	Greater than 1,000 kg	281
25 to 1,000 kg/mo	Up to 1,000 kg	2,781

Definitions: kg = kilogram, mo = month, 25 kilograms = 55 pounds, 1,000 kilograms = 2,200 pounds

The Department's inspections appear to be high in quality. The Department applies the same regulatory standards to all companies that produce 25-1,000 kilograms of hazardous waste per month, and applies more stringent standards to companies that generate 1,000 kilograms or more of hazardous waste per month. The Department's inspection procedures are detailed and cover various aspects of hazardous waste management such as identification, storage, and handling of hazardous waste; recordkeeping; personnel training; and contingency plans. We accompanied Department inspectors on three inspection visits, and noted that they interviewed company officials, reviewed company files and records, filled out inspection checklists, and visually inspected the facility. When necessary, the inspectors also took pictures of containers, equipment, or specific areas at the facility.

Examples of Inspections Done by Department Inspectors

We accompanied the Department's inspectors during inspections of three regulated firms. The inspectors seemed knowledgeable and the inspections were thorough. The problems found at the three locations varied greatly.

Loctite Corporation, Kansas City: Loctite is classified as an EPA generator, because the firm produces more than 1,000 kilograms of hazardous waste per month. Some hazardous waste containers were improperly labeled, and some containers were left open in violation of the regulations. The company was not conducting weekly inspections of hazardous waste storage containers. Required information was missing from the emergency contingency plan. The company also had no documented training of personnel since 1985.

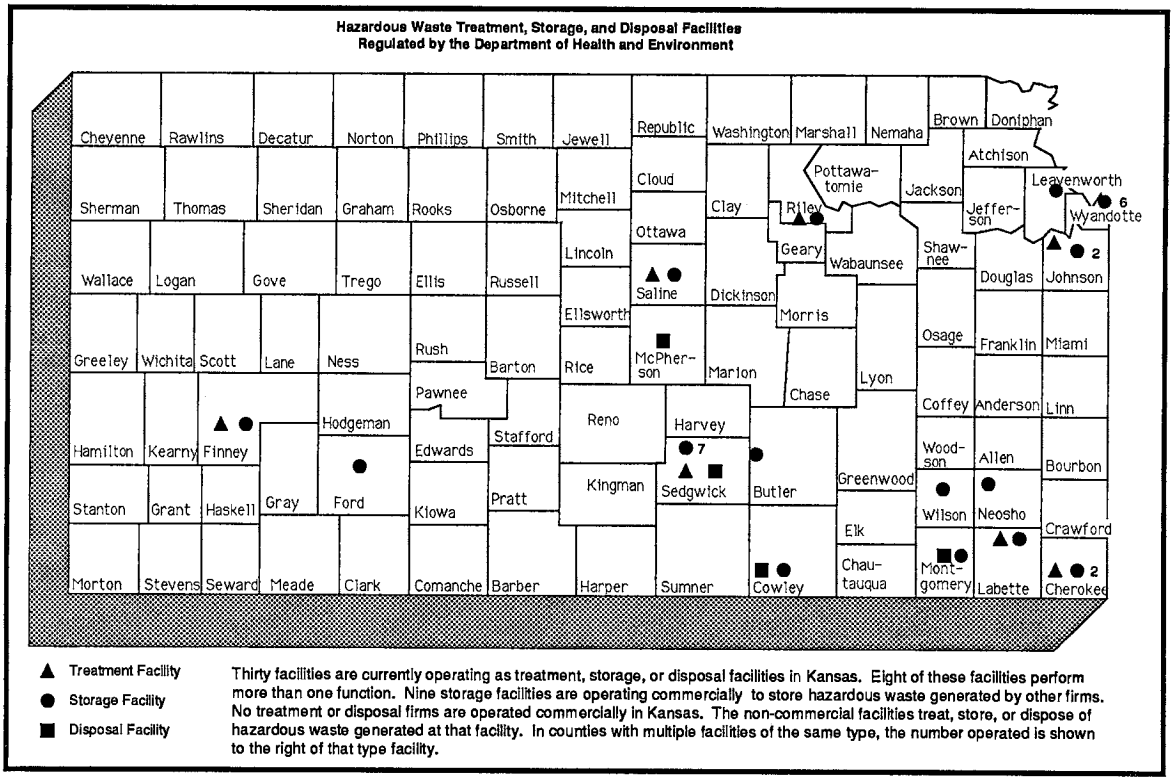
Central Power Products, Inc, Emporia: As a Kansas generator, the firm sometimes exceeded the allowable monthly production limit of 1,000 kilograms of hazardous waste. A shipping manifest was not properly documented by the company. The company's emergency plan did not contain all required information. Personnel training had not been documented as required.

Olin Water Services, Kansas City: Olin Water Services is both an EPA generator and a hazardous waste storage facility. No violations of the Kansas hazardous waste regulations were found during the inspection.

Inspectors sent deficiency letters to the two firms that were found to be out of compliance with the hazardous waste regulations.

Because the Environmental Protection Agency does not review the Department's program for regulating companies that produce less than 100 kilograms of hazardous waste per month, we reviewed 21 inspection files of companies that produced 25-100 kilograms of hazardous waste per month. In our review, we found that inspectors generally completed all parts of the inspection form and always informed generators of any deficiencies found during inspections, as required by State regulations.

The Department has generally complied with State requirements when issuing or denying permits to facilities



that treat, store, or dispose of hazardous waste. There are 30 treatment, storage, and disposal facilities now in operation in Kansas. The locations of these facilities are shown in the map above, and are listed in Appendix B.

The Department issued three permits and denied four permits in federal fiscal year 1988. In all seven cases, the Department met the requirement of inspecting facilities before issuing or denying permits. It also met the requirement of making final decisions on issuing permits within 240 days, except in one case when the Environmental Protection Agency delayed a joint permit.

Some Aspects of the Department's Hazardous Waste Management Program Are Not Adequate

Although the Environmental Protection Agency concluded that the Department generally followed federal requirements in managing its hazardous waste program, we found some inadequacies in the Department's management of its hazardous waste program.

The Environmental Protection Agency criticized the Department's handling of high-priority violators last year. In its review of Kansas' hazardous waste program for federal fiscal year 1988, the Environmental Protection Agency noted that the Department did not have adequate resources to develop enforcement cases, to take stronger actions against companies that did not meet State and federal requirements,

and to meet timeliness criteria. In some cases, inspectors classified high-priority violators as less serious violators. The Environmental Protection Agency defines a high-priority violator as one who has caused actual exposure or a substantial likelihood of exposure to hazardous waste, is a repeat violator, deviates from terms of a permit or order, or substantially deviates from federal statutory or regulatory requirements.

When violations of hazardous waste regulations are discovered through inspections or complaints, the Department has the statutory authority to take enforcement actions such as warning letters, administrative orders, fines, or other actions. The goal of enforcement action is to return the facility to compliance as soon as possible and to deter potential violators by imposing economic sanctions.

Of 11 companies that were classified as high-priority violators in federal fiscal year 1988, the Environmental Protection Agency determined that the Department took appropriate and timely actions against four. The other seven cases were not dealt with timely, and one also lacked an appropriate penalty. For more details about some of these cases, see the boxes on the facing page. To address these problems, the Environmental Protection Agency recommended that the Department make numerous changes, including:

- establishing timeframes for conclusion of negotiations on consent agreements
- assessing appropriate penalties that reflect the extent of the violations
- significantly increasing resources for development of formal enforcement actions

The Department did not have current data on the number of companies that produce hazardous waste and the amount of hazardous waste produced. Department officials were unable to provide an accurate count of all regulated companies that produce hazardous waste, and the amount produced by each of these companies. For example, the number of companies that produce 1,000 kilograms or more of hazardous waste per month varied from 82 to 360 on various documents obtained from the Department. Currently, the Department is in the process of converting its data management from an out-dated federal computer system to a new federal data management system.

For some companies that produce hazardous waste, Department inspections are done rarely, if ever. According to the Department's inspection schedule, companies that treat, store, or dispose of hazardous waste are inspected by Department inspectors at least once a year. It also plans to inspect companies that produce 1,000 kilograms or more of hazardous waste per month at least once every 18 to 20 months, but the Department does not have any schedule for inspecting companies that produce less than 1,000 kilograms of hazardous waste per month. Based on the number of inspections conducted by the Department in federal fiscal year 1988, it would take approximately 16 years to inspect all regulated companies that produce less than 1,000 kilograms of hazardous waste per month.

Inadequate Enforcement Actions Taken by the Department

According to the Environmental Protection Agency, the three high-priority violator cases listed below were not handled properly by the Department of Health and Environment.

Kansas Power and Light Co. (Abilene, Minneola, and Calista) was cited for improper disposal of hazardous waste. The company was operating non-permitted hazardous waste impoundments at three separate locations. The operation of these impoundments threatened to cause pollution to the land and water. The Department and the company have entered into a consent order to correct the problems. Kansas Power and Light agreed to pay $9,000 in hazardous waste storage facility monitoring fees for 1987 and 1988. The Environmental Protection Agency concluded that the Department had assessed inadequate penalties against the company. The Environmental Protection Agency may file for additional penalties.

Kansas Army Ammunition Plant (Parsons) was cited for improper disposal of hazardous waste. The company discharged hazardous waste into the environment which threatened to cause pollution to the land and water and a hazard to public health. The Department and the company have developed a consent order to correct the problem, but it was not signed at the time of the audit. The Environmental Protection Agency concluded that the Department's enforcement actions took more than a year and were not timely, based on federal guidelines.

Williams Pipeline (Augusta) was cited for inadequate groundwater monitoring to detect pollution. Inadequate monitoring of the groundwater allows potential for groundwater contamination from the two impoundments at the facility. The Department and the company have been negotiating a consent order to correct the deficiencies. According to the Environmental Protection Agency, the Department's enforcement actions in this case took more than a year and were not timely.

Regulated Firms Dumped Their Hazardous Waste

The four high-priority violator cases listed below involved companies that dumped their generated hazardous waste on the ground at their facilities.

Deluxe Specialties Manufacturing (Hutchinson) was cited for improper disposal of hazardous waste. The company was dumping hazardous waste on the ground, which contaminated the soil and groundwater. According to Department officials, the contaminated soil has been removed or is being treated.

KBK Industries (Rush Center) was cited for improper disposal of hazardous waste. The company was dumping hazardous waste on the ground, which contaminated the soil. Company officials reportedly said that the waste was dumped because their recycling equipment was not working. The company has appealed the administrative penalty order for $4,000 issued by the Department.

Economy Chrome (Kansas City) was cited for improper disposal of hazardous waste. The company disposed of hazardous waste into the ground under a building through a hole cut in the concrete floor. The improper disposal caused possible groundwater contamination. The Department filed action against the company in Wyandotte County District Court, and the company has been ordered to cease operation of the facility until all operations at the facility comply with the State and federal hazardous waste statutes and regulations. The court further ordered the removal of all contaminated soil.

Hackney and Sons (Independence) was cited for numerous failures to comply with hazardous waste regulations in the area of personnel training, as well as the storage, marking, and inspection of hazardous waste. The Department found some evidence of soil contamination at the facility. The company signed a consent order issued by the Department and paid a $4,000 penalty.

The Department's complaint-handling system has not ensured that all complaints are resolved properly. Department policy requires that complaints about hazardous wastes be given top priority, and that the person filing the complaint be sent a response. Complaints may be made by any person, including someone who works for a firm that handles hazardous waste. The complaints we reviewed included allegations of improper disposal of hazardous waste, improper handling of chemicals, and a chemical spill.

The Department did not have a written procedure for responding to complaints about hazardous wastes. It also did not have a log of all complaints that were re-

ceived in the Department's central and district offices. The Department's central files did not always show how or when complaints were resolved. Complaints are generally referred to district offices for investigation. After receiving a complaint, district inspectors usually conduct a complete inspection (not limited only to the complaint). Inspectors are supposed to forward a copy of the inspection report and all correspondence to the central file in Topeka. We reviewed a sample of 18 complaints received and investigated by the Department in federal fiscal year 1988. The central files did not have complete information in more than half of the cases, including three cases in which inspectors did not prepare any files.

Without a written complaint procedure and a central log of all complaints received, Department managers cannot ensure that all complaints are investigated or documented consistently by district inspectors, that complaints are resolved on a timely basis, or that a response is sent to the person who filed the complaint.

The Department has not conducted a formal, annual review of hazardous waste injection well permits. State regulations require that injection well permits must be reviewed at least once every year. Only Vulcan Materials of Wichita has been issued a permit to operate injection wells for underground disposal of hazardous waste. The company has five injection wells. We found that the Department did not have a formal procedure to record its assessment of injection well permit reviews, but it routinely monitored hazardous waste injection wells and reviewed monthly reports on these wells.

Conclusion

The Department's procedures for regulating companies that produce, treat, store, or dispose of hazardous waste are in compliance with federal and State legal requirements, and are generally being followed. According to the Environmental Protection Agency, the State has established adequate procedures to regulate companies that produce, treat, store, or dispose of hazardous waste, and for the most part, the Department of Health and Environment has followed the established procedures. However, the federal review noted significant problems in the Department's handling of its enforcement actions against companies rated as high-priority violators.

In addition to the federal review, we noted several inadequacies in the Department's regulatory program. We found problems related to the Department's inspection scheduling, its handling of complaints, and its review of injection well permits.

Recommendations

1. To ensure that all hazardous waste generators are inspected within a reasonable time, the Department should establish a goal or timeframe for inspecting all entities that generate at least 25 kilograms of hazardous waste per month.

2. To ensure that hazardous waste complaints are always resolved properly, the Department should establish a written procedure for handling complaints. The written procedure should include a system for tracking the investigation and resolution of complaints.

3. To ensure that statutory compliance is documented, the Department should formally record its yearly review of injection well permits.

Has the State Established Adequate Procedures To Reduce the Quantity of Hazardous Waste, And Are Those Procedures Being Followed?

The Department has not established a program to ensure that production of hazardous waste is minimized. However, the Department has recently received a federal grant of $320,000 that should enable it to establish a Statewide program of waste minimization.

The State Does Not Have an Established Program to Ensure that Hazardous Waste Production Is Minimized

Department of Health and Environment officials told us that the preferred option for dealing with hazardous waste is to reduce or minimize the production of waste. In a handbook prepared for companies that generate hazardous waste, the Department listed the following alternatives, in order of desirability.

Waste Reduction	a technique where the total volume of hazardous waste produced is reduced by making changes in the materials or process used
Waste Separation	a process where the total amount of hazardous waste is reduced by keeping the hazardous waste from contaminating non-hazardous waste
Material Recovery	a process where a material is recovered through recycling (most common is the recovery of solvents through distillation)
Energy Recovery	a process where a hazardous waste is blended with other materials and used for fuel in boilers or furnaces
Waste Treatment	a process where the hazardous waste is treated so that the waste is no longer hazardous
Disposal	a process where hazardous waste may be disposed of by chemical destruction, deep well injection, or above-ground burial if the waste is not suitable for any other hazardous waste management alternative

Department officials told us that the main incentive for companies to minimize the production of hazardous waste is the economic cost of handling and disposing of the waste. The current regulatory process also creates incentive for minimizing the production of hazardous waste. For example, the Department's annual fee is graduated from $100 to $5,000 per year, depending on the amount of hazardous waste a company generates. In addition, all regulatory fees are waived if a company gener-

ates less than 1,000 kilograms of hazardous waste monthly, and contracts for recycling the waste material.

Current State procedures are designed mainly to gather information about what hazardous waste generators are doing to minimize waste production. Both federal and State regulations require a company that generates hazardous waste to complete a manifest whenever hazardous waste is transported off the generator's site. This document, which must be signed by the company, includes the following certification:

> If I am a large generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method for treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; or, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

During inspections, Department inspectors generally review all manifests to ensure that each has been signed by a representative of the company that initiated the manifest.

Hazardous waste generators are also required to submit to the Department biennial reports which include a section on their waste minimization efforts. These reports include information about the types of actions taken to minimize waste, costs of the minimization efforts, problems encountered in the efforts to minimize waste, and the types and amounts of hazardous waste reduced. At the time of the audit, the Department had not finished compiling information from the 1987 biennial reports. We reviewed the 1987 biennial reports from five companies that the Department said were actively seeking to minimize their hazardous waste. The companies reported the following types of waste minimization actions.

- Non-hazardous waste materials were substituted for hazardous chemicals used in their industrial processes
- Hazardous wastes were recovered through recycling for reuse in their manufacturing processes
- Markets were found for the hazardous waste as a sellable item for use in other companies' processes
- Hazardous waste was blended with other materials and used as a fuel

Officials from region seven of the Environmental Protection Agency told us that the Department's waste minimization efforts comply with federal requirements. They

also said that the Department is doing as much as it can to minimize hazardous waste produced in the State, within the current resources available.

Over the Next Three Years, the Department Plans to Develop and Implement a Statewide Program of Waste Minimization

In September 1988, Kansas was awarded a three-year, $320,000 grant from the Environmental Protection Agency to establish a program for minimizing hazardous waste. The grant is to support a joint effort of the Department of Health and Environment, the University of Kansas, and Kansas State University.

The Department is the lead agency to develop a State Training Action Plan, a five-year plan to describe the goals, objectives, resources, and implementation of the training and technical-assistance programs. The University of Kansas' Division of Continuing Education will develop and implement the training programs regarding hazardous waste minimization.

Kansas State University will develop a technical-assistance pilot project. The primary goal of the pilot project is to improve the management of hazardous waste in Kansas by reducing the amount of waste generated. A secondary goal of the project is to minimize the regulatory burden of effective waste management, particularly as it relates to small and medium-sized businesses. Kansas State University will also develop a pilot waste minimization project to reduce waste generated at the University.

Department officials told us that, by the end of 1989, they expect the State Training Action Plan will be completed, the first hazardous waste minimization news letter will be published, technical-assistance literature will be prepared, the initial steps of the pilot project at Kansas State University will be started, and some technical-assistance site visits and evaluations will occur.

Kansas is also to share in a three-year, $3 million grant to create a hazardous substance research center to serve the needs of regions seven and eight of the Environmental Protection Agency. The grant was approved in February 1989 for Kansas State University and six other universities to establish the research center. Headquarters for the center is to be located at Kansas State University. The center's objectives include waste minimization and the development of waste treatment technologies.

Other States Have Taken Various Steps to Minimize the Production of Hazardous Waste

We contacted officials in other states to determine what those states were doing to minimize the generation of hazardous waste. The states were suggested by federal officials who believed that these states had particularly good minimization programs. The suggested states were California, Illinois, Minnesota, New York, and North Carolina.

All five of the states have established libraries and information clearinghouses to provide companies with a central location where hazardous waste reduction information is available on request. Generally, these functions also update and interpret new technical information for industry as it is received.

Officials in four of the states indicated that state personnel regularly attend and speak at industry conferences and also provide seminars that promote the reduction of hazardous waste. Three states produced publications that addressed hazardous waste reduction. These publications included quarterly newsletters, checklists, fact sheets, handbooks, or manuals for industry.

Two states reported that state agencies produced listings of firms in the hazardous waste business so that firms generating hazardous waste could locate the type of facility needed. Another state published an exchange list of companies with waste for recycling and other facilities that were looking for waste to recycle.

Conclusion

The Department has not established a hazardous waste minimization program, but is in the process of developing such a program. The Department has received a $320,000 grant from the Environmental Protection Agency to establish the program. As the Kansas program is developed, the Department should consider successful steps taken by other states.

Has the State Established an Adequate System for Monitoring the Movement of Hazardous Waste, And Is It Being Followed?

Kansas is meeting the federal requirements for monitoring the movement of hazardous waste. The system generally appears to be working as intended. We did note that the Department does not have an adequate system for tracking and resolving descrepancies in hazardous waste shipments. These findings are discussed further in the following sections.

Kansas' Manifest System Meets the Requirements Of Federal Hazardous Waste Regulations

The federally mandated manifest system is intended to provide a paper trail when hazardous waste is in transit. The manifest system actually monitors hazardous waste shipments on a point-to-point basis, rather than for the life of the waste. The Environmental Protection Agency does not actively monitor the movement of hazardous waste, but requires a company to prepare and sign a manifest whenever hazardous waste is to be transported off-site. Through the manifest system, the company that generates hazardous waste is partly responsible for ensuring that the waste reaches the appropriate destination.

Kansas has adopted the federal manifest system without significant change. To track transported waste, State regulations require a company to prepare a manifest, a one-page form with copies for each of the participants in the hazardous waste shipment. The manifest identifies the type and quantity of waste, the company that generated the waste, the transporter, and the facility to which the waste is being shipped. The form is to be signed by the the company that initiated the shipment, the transporter's representative, and by the facility that receives the shipment.

Firms that transport hazardous waste are required to register with the Department. These transporters pick up packaged and labeled waste from companies that generate hazardous waste, and transport it to designated facilities that treat, store, or dispose of the waste. When the waste reaches its destination, a copy of the manifest should be returned to the company that generated it to confirm that the shipment arrived.

Any company that does not receive a signed copy back from the designated facility within 35 days is supposed to contact the transporter and the designated facility to determine the status of the hazardous waste shipment. If a generator does not have the signed copy of the manifest from the facility within 45 days, the generator is to submit an exception report to the Department.

Facilities that treat, store, or dispose of hazardous waste must maintain records of waste that is received. These facilities must record the quantities and types of hazard-

ous waste received, the method of treatment, storage, or disposal, and the location of all hazardous waste at the facilities. Any shipment of hazardous waste received without a manifest must be reported to the Department.

The Department checks for compliance with manifest requirements during inspections of companies that generate hazardous waste and other facilities. Inspectors generally review all manifests for hazardous waste shipments. They check to see that the manifests were completely and correctly filled out, that the original copy of each manifest was signed by the generator and the transporter, and that the generator has a copy of each manifest signed and returned by the designated facility.

In addition to the manifest requirements, a company must include information on the biennial report about the movement of hazardous waste to off-site treatment, storage, or disposal facilities. The information provided includes the types of hazardous waste shipped off-site, the amount of waste, and the names of the facilities used by the generator. The information from the 1987 biennial reports has not yet been compiled by the Department. The last information available was for 1985.

Environmental Protection Agency officials said that the Kansas procedures for monitoring the movement of hazardous waste are adequate and in compliance with federal regulations. Federal regulations require transporters of hazardous waste to have an Environmental Protection Agency identification number. Beyond that, Kansas requires any firm transporting hazardous waste within, into, out of, or through the State to register with the Department of Health and Environment. To register, a transporter must provide an insurance certificate with a minimum of $500,000 liability coverage, have a federal identification number, and pay an annual fee of $250 to the Department.

The Department has also designated all interstate routes, U.S. highways, and State highways as preferred routes for movement of hazardous waste. Transporters of hazardous waste are to ensure that any vehicle containing hazardous waste is operated over routes that minimize risk to public health and safety. Transporters are also to use an interstate system bypass or beltway around a city, if available.

The manifest system depends to some extent on the cooperation of the participants—generators, transporters, and destination facilities—to fill out documents and to report discrepancies when they occur. Other states have required firms to submit a copy of every manifest to the appropriate state agency. Information on manifests is entered on a computer to see that all manifests are complete and that they match up with copies submitted by destination facilities. According to Department and federal officials, Kansas does not need to set up such a system. Those officials said that the expense could not be justified for the results that might be achieved. We agree with this assessment because of the following factors:

- In fiscal year 1985, less than one percent of the hazardous waste generated in Kansas was shipped off-site

- There are no treatment or disposal facilities in Kansas that accepted hazardous waste from other firms, so waste would generally be handled on-site or shipped to a storage facility

- Department officials said that the manifest system is working as it is currently set up in Kansas. Most problems are minor, such as manifests being incorrectly filled out

- According to Environmental Protection Agency officials, Kansas has not had significant problems with unscrupulous transporters

The Department Has Not Had Adequate Methods For Resolving Discrepancies Concerning Hazardous Waste Shipments

K.A.R. 28-31-4 requires each company that generates hazardous waste to submit an exception report to the Department if the company has not received a copy of a manifest signed by the owner or operator of a designated facility within 45 days of the date the waste was shipped off-site. Exception reports are designed to provide information about hazardous waste shipments and to document efforts taken by the generators to locate the shipments and the results of those efforts. The Department needs this information to take actions to locate missing shipments or documents, and to notify the appropriate federal officials. Such actions must be taken to reduce the risk to the public and the environment from intentional or unintentional mishandling of hazardous waste shipments.

The Department has not maintained a central file system for all manifest exceptions. Because the central office in Topeka did not log exceptions, and there was no file for manifest exceptions, supervisory personnel in the Topeka office could not identify all the exceptions found during inspections. Department officials had to rely on district inspectors to identify exceptions noted during inspections. We reviewed the files of 12 companies identified as having manifest exceptions. Two of the exceptions had been reported by the companies that generate hazardous waste, as required by the regulation. The other ten, identified by district inspectors, were discovered during inspections conducted by the Department.

In the two cases reported by the companies, appropriate letters were submitted to the Department's central office in Topeka shortly after the end of the 45-day period. The letters informed the Department about what hazardous waste was shipped, when it was shipped, and where it had been shipped. The letters also described the actions taken by the company to locate the waste and the missing documentation. The Department initiated a manifest exception form, followed up with letters or phone calls, and resolved the problems within a few days.

The exceptions identified during Department inspections did not appear to receive the same level of attention from the headquarters staff in Topeka. Resolution of

these cases was left to district inspectors. These manifest exceptions were addressed in letters to the companies, along with the other discrepancies found during the inspections. The letters provided a deadline for each company to resolve the inspection discrepancies. At the time of our review, the central files did not include any record of a resolution for 7 of the 10 exceptions identified by the inspectors. Documentation of the resolution of these cases was obtained later from the district offices.

Of the seven files lacking documentation of final resolution, four contained adequate information to show that an average of nearly eight months had passed since the generator shipped the hazardous waste, and an average of four months had passed since the discrepancies were identified by the inspectors. Although none of these cases involved waste that did not arrive at the designated facility, the threat to the public is too great for Department supervisory staff to allow that much time to pass without actively seeking to locate the hazardous waste shipment. In these cases discovered by inspectors, manifest exceptions were handled less formally and took longer to resolve than cases reported directly to the Topeka office.

In order for the manifest system to work as intended, generators must report to the Department when they do not receive a signed copy of the manifest within 45 days after the waste was accepted for transport. During our review of manifest exceptions, we noted that no penalties were assessed against generators who failed to report exceptions to the Department. K.A.R. 28-31-4 clearly specifies what information must be included in an exception report, but does not set a deadline for when the report must be sent to the Department.

Conclusion

Generally, the Department of Health and Environment's procedures are adequate to monitor the movement of hazardous waste in Kansas. However, the Department has not maintained a central file system to keep track of manifest exceptions. Manifest exceptions discovered during Department inspections of companies that generate hazardous waste were not resolved timely, and were not adequately documented in the official files at the Topeka office. The Department did not generally assess penalties against companies for failing to report manifest exceptions.

Recommendations

1. The Department should establish a formal system for tracking manifest exceptions until each is resolved. All exceptions, including those identified during inspections, should be resolved through this system. Supervisors in the central office should ensure that all manifest exceptions are resolved as promptly as possible, and that adequate documentation is maintained in the official files.

2. The Department should revise State regulations to set a deadline for companies to submit manifest exceptions reports.

3. The Department should assess appropriate penalties against companies that fail to report manifest exceptions as required by State regulations.

APPENDIX A

Largest Hazardous Waste Generators in Kansas

Based on reports submitted to the Department, the following companies produced at least 500 tons of hazardous waste in 1987.

Facility Name	Location	Hazardous Waste Generated in 1987 (tons)
Vulcan Materials Company	Wichita	1,848,481
Total Petroleum, Inc.	Arkansas City	6,950
Pyrochem	Coffeyville	4,859
T.H. Agriculture and Nutrition Company	Kansas City	3,293
General Motors -- Fairfax	Kansas City	2,148
Owens Corning Fiberglas	Kansas City	1,872
Pratt and Lambert	Andover	1,484
Air Products and Chemicals, Inc.	Wichita	1,200
FMC Corporation	Lawrence	879
Safety-Kleen Corporation	Wichita	676
Safety-Kleen Corporation	Edwardsville	671
Boeing Military Aircraft Co.	Wichita	538

APPENDIX B

Hazardous Waste Treatment, Storage and Disposal Facilities Operating in Kansas

The listed facilities treat, store, or dispose of hazardous waste as indicated. Each of these facilities is also a generator of hazardous waste.

		Type of Facility		
Facility Name	Location	Treatment	Storage	Disposal
Air Products and Chemicals, Inc.	Wichita		X	
Ash Grove Cement Plant	Chanute		X	
Ashland Chemical Company	Kansas City		X	
Boeing Military Aircraft Co.	Wichita		X	
Colgate-Palmolive Company	Kansas City		X	
Farmland Industries	Coffeyville		X	X
Fort Leavenworth	Fort Leavenworth		X	
Fort Riley	Fort Riley	X	X	
General Electric, Inc.	Arkansas City		X	
General Motors -- Fairfax	Kansas City		X	
General Motors -- Delco-Reamy	Olathe		X	
Hydrocarbon Recyclers, Inc.	Wichita		X	
Kansas Army Ammunition Plant	Parsons	X	X	
Lafarge - Fredonia	Fredonia		X	
McConnell Air Force Base	Wichita		X	
National Cooperative Refinery Assn.	McPherson			X
Olin Water Services	Kansas City		X	
Pratt and Lambert	Andover		X	
Pueblo Chemical Supply Co.	Garden City	X	X	
Safety-Kleen Corporation	Dodge City		X	
Safety-Kleen Corporation	Edwardsville		X	
Safety-Kleen Corporation	Wichita		X	
Smoky Hill Weapons Range	Salina	X	X	
Sunflower Army Ammunition Plant	DeSoto	X	X	
Thermex Energy Corporation	Columbus		X	
Thermex -- Explosives Testing Lab	Hallowell	X	X	
Total Petroleum, Inc.	Arkansas City			X
U.S. EPA Laboratory	Kansas City		X	
Van Waters & Rogers	Wichita		X	
Vulcan Materials Company	Wichita	X	X	X

APPENDIX C

Agency Response

On April 14, 1989, we provided copies of the draft audit report to the Department of Health and Environment and the Environmental Protection Agency for review and comment. The Department's written response is included in this appendix. The Environmental Protection Agency made no written response, and told us that no changes were required.

In the Department's response to recommendation #2 on page 24, the Secretary of Health and Environment suggested that a deadline for submitting manifest exception reports is stated in the current regulation. We think the regulation is ambiguous and should be clarified.

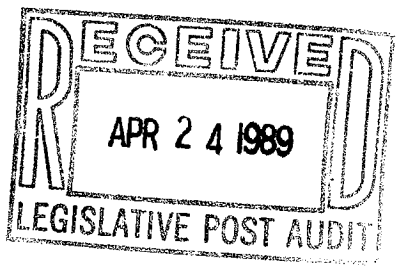
STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT
Forbes Field
Topeka, Kansas 66620-0001
Phone (913) 296-1500

Mike Hayden, *Governor*

Stanley C. Grant, Ph.D., *Secretary*
Gary K. Hulett, Ph.D., *Under Secretary*

April 21, 1989



Meredith Williams
Legislative Post Auditor
Legislative Division of Post Audit
109 West 9th, Suite 301
Topeka, Kansas 66612-1285

Dear Mr. Williams:

This is in response to your April 14, 1989 letter which transmitted a draft of the performance audit report, Hazardous Waste Regulation in Kansas. We have reviewed the draft report and wish to provide the following comments.

1. ***Page 3, Paragraph 3***

   The last sentence of this paragraph currently reads, "The majority of this waste was used in a cement kiln in Fredonia." It is our suggestion that after the word "used", the phrase "as supplementary fuel" be inserted.

2. ***Page 5, Paragraph 2***

   It is true that the Resource Conservation and Recovery Act (RCRA) was amended in 1984. However, it was the original legislation which allowed states to implement their own hazardous waste program in lieu of the federal program. The 1984 amendments simply broadened the scope of RCRA.

3. ***Page 5, Box***

   In the last paragraph in the box at the bottom of page, the final sentence currently reads, "These inspectors also conduct inspections of solid waste treatment facilities." It is our suggestion that the phrase "and underground storage tank installations" be inserted after the word "facilities."

4. Page 10, Last Paragraph of Box

The box provides three examples of inspections done by department inspectors. The final sentence in this box currently reads, "Inspectors sent deficiency letters to the two firms that were found to be out of compliance with the hazardous waste regulations." We wish to note that, consistent with our normal procedures, a letter was also sent to Olin Water Services, Kansas City, confirming the company's compliance with the hazardous waste regulations.

5. Page 12, Paragraph 3

Your discussion of the Department's handling of high priority violators (pages 11, 12, and 13) warrants additional information. EPA evaluates the Department on the timeliness and appropriateness of enforcement actions in accordance with the federal Enforcement Response Policy. In terms of appropriateness, eight of the nine completed actions were viewed by EPA as appropriate. Although EPA does not concur, the Department views the ninth action also to be appropriate for the conditions at the site.

In regard to timeliness, the Department recognizes that enforcement response should be timely in order to be effective. However, the amount of time needed to complete an enforcement action varies with the nature of the problem and the number and type of parties involved.

The Kansas Army Ammunition Plant at Parsons is an example of a complex problem that cannot reasonably be addressed within the 135 day time frame. The site involves hazardous waste and water quality problems. The wastewater treatment facility for one area of the plant had a long history of noncompliance with permit conditions. Due to this fact, the Department pursued a multi-media consent agreement that will resolve both water and hazardous waste issues and includes the Army and its plant operating contractor as signatories to the agreement. Many of the problems at the site were being addressed while negotiations were underway. The agreement, which has been signed by all parties, is only the third in the country where both the Army and the operator of the plant have been included in the Consent Agreement. The Williams Pipeline Consent Agreement has also been signed.

Unilateral actions involving only one program area can generally be handled more quickly. As evidence of this, the average time for completion of the eight unilateral actions issued by the Department was 127 days, well within the 135 day time frame contained in EPA's Enforcement Response Policy.

6. *Page 12, Paragraph 6*

A statement is made in this paragraph that, "the Department does not have any schedule for inspecting companies that produce less than 1,000 kilograms of hazardous waste per month." We agree that there is no formal plan for inspecting these small generators. The Department does maintain an inspection candidate list which is a compilation of all such facilities to be inspected. As inspections are performed, the list is revised to note the inspections. These inspections are being done at small generator facilities in a way so as to optimize existing resources. As these inspections take less time to perform than do inspections at larger facilities, they are often used to fill out a work day when an inspector is in a city on scheduled work. In this way small generators are inspected while travel costs are minimized.

7. *Page 13, Last Paragraph Beneath Box*

The report states that the Department, "...did not have a log of all complaints that were received in the Department's central and district offices." We do have a log of all complaints received in the central office and this log will be expanded to include all complaints forwarded to the central office by the district offices. A *Complaint Report Form* will also be developed.

8. *Page 14, Paragraph 3*

The report states that "... the Department did not have a formal procedure to record its assessment of injection well permit reviews...". We note that such reviews have been done in the past but that the documentation of such reviews is lacking. We agree to improve this documentation.

9. Page 19, Paragraphs 2 and 3

In the discussion of steps that other states have taken to minimize production of hazardous waste, the report states that, "Officials in four of the states indicated that state personnel regularly attend and speak at industry conferences and also provide seminars that promote the reduction of hazardous waste. You further noted that, "Two states reported that state agencies produced listings of firms in the hazardous waste business so that firms generating hazardous waste could locate the type of facility needed."

We wish to note that KDHE personnel also regularly attend conferences and speak on the advantages of waste reduction. In addition, our Bulletin 4.1 provides hazardous waste generators with information regarding facilities that manage hazardous wastes.

10. Page 22, Paragraph 5

The first sentence in this paragraph states, "The Department has not maintained a central file system for all manifest exceptions." KDHE does have a file system for manifest exception reports which are received from generators. This system will be expanded to include manifest exceptions which are identified during inspections.

11. Page 24, Item No. 2 in Box

This is a recommendation which states, "The Department should revise State regulations to set a deadline for companies to submit manifest exception reports."

This requirement already exists. K.A.R. 28-31-4(f)(4)(B) requires generators to submit an exception report within 45 days of the date the waste was accepted by the initial transporter.

We appreciate this opportunity to comment on the draft audit report.

Sincerely,

Stanley C. Grant, Ph.D.
Secretary