

August 1996

RESOURCE
CONSERVATION AND
RECOVERY ACT

Inspections of Facilities
Treating and Using
Hazardous Waste Fuels
Show Some
Noncompliance



**Resources, Community, and
Economic Development Division**

B-272528

August 30, 1996

The Honorable William V. Roth, Jr.
The Honorable Daniel K. Inouye
United States Senate

The Honorable Charles Wilson
House of Representatives

Cement producers use large amounts of fuel to heat raw materials, including limestone and clay, to make cement. In the 1970s, these producers recognized that using fuels derived from hazardous waste to supplement the coal, oil, and natural gas that they typically burn to make cement could substantially reduce their fuel costs. The producers can reduce their costs because, instead of paying suppliers for traditional fuels, they are themselves paid by fuel blenders to burn hazardous waste fuels. Fuel blending facilities process many types of hazardous waste—such as paints, solvents, and used oil—into fuels that can be burned in cement kilns, which are regulated as a type of industrial furnace.¹ The facilities that blend hazardous waste into fuels and the cement production facilities that burn these fuels are both governed by regulations established under the Resource Conservation and Recovery Act of 1976 (RCRA), which is administered by the Environmental Protection Agency (EPA) and certain states.

You expressed concerns about whether the facilities that blend hazardous waste fuels and the cement production facilities that burn these fuels are operating in a manner that protects human health and the environment. Therefore, as agreed with your offices, we are providing you with information on the results of recent inspections of these facilities in five states—Kansas, Missouri, Ohio, Pennsylvania, and Texas. These inspections assessed the facilities' compliance with RCRA's (1) treatment, storage, and disposal regulations for the processing of hazardous waste fuels by fuel blenders and (2) boiler and industrial furnace regulations for the burning of these fuels by cement producers. Specifically, we focused on the results of the states' recent inspections of the 34 facilities that blend fuels and EPA's and the states' inspections of the 11 cement production facilities that burn hazardous waste fuels in these five states.

Under RCRA, both of these sets of regulations must ensure the protection of human health and the environment. To verify that fuel blenders and

¹An industrial furnace produces heat for use in manufacturing a variety of products.

cement producers are complying with the regulations, state and EPA hazardous waste management officials are required to conduct periodic inspections. If an inspection identifies a violation at a facility, EPA or the state can take a number of actions to bring the facility back into compliance with RCRA's regulations, including working with the facility's operator to resolve the problem and imposing a fine. When an inspector believes that a violation poses an imminent threat to human health or the environment, the inspector can initiate an action that will shut down any waste management activity at the facility.

Results in Brief

The most recent Resource Conservation and Recovery Act inspections of fuel blending facilities identified many minor but few serious violations of waste treatment, storage, and disposal regulations. These inspections identified at least one minor violation at 23 of the 34 facilities in the five states we reviewed. The minor violations, found in all five states, included inadequately labeling hazardous waste storage containers and having an inaccurate emergency coordination list. Significant violations were found in four of the five states—Kansas, Ohio, Missouri, and Texas. These violations were identified at 11 of the 32 facilities in these four states and included having storage containers in poor condition and storing waste in excess of approved capacity. State officials are working with these fuel blenders to ensure that the violations are corrected.

The most recent Resource Conservation and Recovery Act inspections of cement production facilities that burn hazardous waste fuels identified some violations of boiler and industrial furnace regulations. At the 11 facilities in the five states we reviewed, these inspections identified no violations at 2 facilities and a number of violations at 1 facility. Although EPA officials did not characterize the violations at this facility as either minor or significant, the agency sent the facility's operator a notice of violation. Because EPA officials are reviewing data from the most recent inspections of the eight remaining facilities, the results of these inspections are not available.

Background

RCRA requires EPA to establish regulations governing the treatment, storage, transportation, and disposal of hazardous waste. Facilities that blend fuels derived from hazardous waste are subject to RCRA's treatment, storage, and disposal regulations. Furthermore, because EPA classifies cement production facilities as industrial furnaces, such facilities that burn hazardous waste fuels must comply with special regulations—known as

the boiler and industrial furnace rule—developed under RCRA in 1991 to regulate the combustion of hazardous waste. Both sets of regulations require facilities to meet standards for emissions and other environmental requirements. The principal regulations applying to the fuel blending and cement production facilities that burn hazardous waste fuels are discussed in greater detail in appendixes I and II, respectively.

EPA is primarily responsible for inspecting hazardous waste management facilities and taking enforcement actions as necessary against the owners and operators of facilities that are not complying with RCRA's requirements. Under RCRA, however, EPA may authorize a state to administer its own hazardous waste program if its program is consistent with the federal program established by EPA and other authorized state programs. An authorized state assumes the primary responsibility for implementing and enforcing RCRA's hazardous waste regulations while EPA oversees the state's activities.

EPA has authorized the five states included in our review to implement their own treatment, storage, and disposal program in lieu of the federal RCRA program, but it has authorized only one of the five states—Texas—to implement the boiler and industrial furnace program. RCRA requires that hazardous waste management facilities requiring a permit, including fuel blenders and cement production facilities burning hazardous waste fuels, be inspected periodically. In conducting their inspections, EPA and the five authorized states do not classify violations as minor or significant. However, these officials told us that, generally, they consider a violation to be minor if it does not pose a serious threat to human health or the environment and the facility agrees to correct it promptly. An action or deficiency that poses a serious threat to human health or the environment or a persistent minor violation is considered to be significant.

Although RCRA's regulations establish general operating practices and procedures with which fuel blending facilities must comply, they place few restrictions on the types of hazardous waste that can be blended. According to EPA officials, facilities can blend wastes that are not reactive providing safety standards are met. In addition, some states prohibit the blending of certain wastes, such as those containing pesticides and polychlorinated biphenyls (PCB) into fuel. Beyond these restrictions, the specifications for the hazardous wastes that are blended into fuels are primarily determined by the cement producers, whose operations must meet the regulations' standards for emissions and other requirements. RCRA's boiler and industrial furnace rule places limits on cement kilns'

emissions. These limits are implemented by restricting the types of hazardous waste that are blended into fuels. Cement producers can burn only waste blends that allow them to meet the established limits on the amounts of regulated constituents—such as metals—that can be fed into the kiln. Furthermore, EPA does not permit the burning of certain inorganic hazardous wastes that contain metals and have a low heating value. In addition, under the Toxic Substances Control Act,² a cement producer must obtain EPA's approval to burn fuel containing PCBs.

As of early 1996, nationwide 142 fuel blenders were processing fuels derived from hazardous waste and 22 cement production facilities were burning such fuels in their kilns. Collectively, the five states included in our review account nationwide for about a quarter of the fuel blenders and about half of the cement producers that burn hazardous waste fuels.

Results of Recent RCRA Inspections of Fuel Blending Facilities in Five States

To verify that fuel blenders are complying with RCRA's treatment, storage, and disposal requirements, state hazardous waste management officials inspect these facilities regularly. Although RCRA requires that these facilities be inspected at least every 2 years, the five states we reviewed conducted more frequent inspections. While Missouri inspected these facilities quarterly, Kansas, Ohio, Pennsylvania, and Texas inspected them at least once a year. Officials inspected the 34 fuel blending facilities in the five states included in our review most recently between April 1995 and May 1996. (App. III summarizes the results of these inspections for each of the five states.)

As table 1 shows, the most recent RCRA inspections of fuel blending facilities in the five states identified at least one minor violation of treatment, storage, and disposal regulations at 23 of the 34 facilities. Minor violations were found at facilities in each state. These violations included, among others, inadequately labeling hazardous waste storage containers, having incomplete records for training and equipment inspections, and failing to submit estimates of the costs of closing facilities and maintaining sites. According to state officials, these types of violations generally are corrected at the time of the inspection or shortly thereafter.

²The Toxic Substances Control Act of 1976 generally bans the manufacture and distribution of PCBs and requires EPA to regulate their disposal.

Table 1: Results of the Most Recent Inspections of Fuel Blending Facilities in Five Selected States

| State | Number of fuel blending facilities | Number of facilities with minor violations | Number of facilities with significant violations | Number of facilities with no violations |
|--------------------------|---|---|---|--|
| Kansas | 2 | 2 | 1 | 0 |
| Missouri | 8 | 6 | 5 | 0 |
| Ohio | 12 | 8 | 4 | 3 |
| Pennsylvania | 2 | 1 | 0 | 1 |
| Texas | 10 | 6 | 1 | 4 |
| Total^a | 34 | 23 | 11 | 8 |

^aThe number of fuel blending facilities with minor, significant, and no violations does not equal the total number of facilities because some had both minor and significant violations.

The following examples illustrate the types of minor treatment, storage, and disposal violations identified and their resolution:

- Kansas officials inspected the state's two fuel blending facilities most recently between October 1995 and April 1996. These inspections identified minor violations at both facilities, including inadequately labeling hazardous waste storage containers and having an inaccurate emergency coordination list. The facilities' operators have corrected most of these violations and are working with state officials to resolve the remaining problems.
- Pennsylvania officials last inspected the state's two fuel blending facilities in early 1996. These inspections identified no violations at one facility and only minor violations at the other, including inadequately labeling hazardous waste storage containers. The facility's operator has corrected these violations.

In addition, the most recent RCRA inspections of these fuel blending facilities identified significant violations of treatment, storage, and disposal regulations at 11 facilities in Kansas, Missouri, Ohio, and Texas. The significant violations included having waste containers in poor condition, storing waste that was not approved under the facility's operating permit, and having inadequate backup systems for containing leaks of hazardous waste. According to hazardous waste management officials in these states, some violations, which would normally be considered minor, would be classified as significant because they either recurred at the same facility or had not been corrected since the previous inspection. State officials told us that the facilities' operators have

corrected some of the identified problems, are addressing others, and are negotiating settlements with the state on still other violations.

The following examples illustrate the types of significant treatment, storage, and disposal violations identified at fuel blending facilities in the five states and their resolution:

- Ohio officials inspected the state's 12 fuel blending facilities most recently between May 1995 and May 1996. They identified significant violations at 4 of the 12 facilities, including not minimizing the possibility of a fire, explosion, or release of hazardous waste at the site and not evaluating the waste as required. State officials are working with the facilities' operators to resolve the identified problems.
- Missouri officials inspected the state's eight fuel blending facilities most recently between November 1995 and March 1996. The significant violations they identified included using storage containers in poor condition, storing hazardous waste in excess of approved capacity, and inadequately analyzing waste. State officials also considered recurring minor violations identified at one facility to be significant. State officials are working with the facilities' operators to resolve the identified problems.

State officials identified no violations of RCRA's treatment, storage, and disposal regulations at eight fuel blending facilities in Ohio, Pennsylvania, and Texas.

Results of Recent RCRA Inspections of Cement Production Facilities Burning Hazardous Waste Fuels in Five States

EPA officials inspect each cement production facility burning hazardous waste fuels in Kansas, Missouri, Ohio, and Pennsylvania about once a year to ensure compliance with RCRA's boiler and industrial furnace requirements. However, according to EPA officials, facilities with a poor compliance record are inspected more often. Texas, the only one of the five states that EPA has authorized to implement the boiler and industrial furnace program, also inspects cement production facilities annually.

The 11 cement production facilities that burn hazardous waste fuels in the five states we reviewed were most recently inspected between May 1995 and June 1996. However, information on only three of these facilities is available because EPA officials are still reviewing data from the inspections of the remaining eight. (App. IV summarizes the results of these inspections, as available, for each of the five states we reviewed.)

As table 2 shows, the inspections of the 11 cement production facilities identified no violations at 2 facilities in Missouri and Texas. However, violations were identified at one facility in Kansas, including not conducting several audits of emission control equipment as required. Without classifying these violations as minor or significant, EPA officials sent the facility a notice of violation.

Table 2: Results of the Most Recent Inspections of Cement Production Facilities in Five Selected States

| State | Number of cement production facilities | Number of facilities with known violations | Number of facilities with no known violations | Number of facilities for which information is not available |
|--------------|--|--|---|---|
| Kansas | 3 | 1 | 0 | 2 |
| Missouri | 4 | 0 | 1 | 3 |
| Ohio | 1 | 0 | 0 | 1 |
| Pennsylvania | 2 | 0 | 0 | 2 |
| Texas | 1 | 0 | 1 | 0 |
| Total | 11 | 1 | 2 | 8 |

Agency Comments

We provided copies of a draft of this report to EPA for its review and comment. We met with EPA officials, including the Chief, Permits Branch, Office of Solid Waste, to obtain the agency's comments. These officials agreed with the information presented in the report but made a number of suggestions for clarifying our discussion. We have incorporated these suggestions into the appropriate sections of the report.

Scope and Methodology

To provide information on the extent to which fuel blending and cement production facilities have been complying with EPA's and the states' principal regulations governing the blending and burning of fuel derived from hazardous waste, we obtained inspection and compliance data for facilities in five judgmentally selected states: Kansas, Missouri, Ohio, Pennsylvania, and Texas. We selected these states for our review because they collectively account for about half of the nation's cement production facilities that burn hazardous waste fuels and almost a quarter of the nation's fuel blenders. Furthermore, these five states are included in 4 of EPA's 10 regions.

To provide information on whether fuel blenders in the five states have been complying with RCRA's treatment, storage, and disposal regulations,

we obtained inspection data from state hazardous waste officials responsible for implementing the regulations. To provide information on whether cement producers have been complying with RCRA's boiler and industrial furnace regulations, we reviewed compliance documents and interviewed officials in EPA's Office of Enforcement and Compliance Assurance, Waste Management Division, as well as officials in EPA regions III, V, and VII. We also interviewed state officials in Kansas, Missouri, Ohio, Pennsylvania, and Texas who are responsible for issuing permits to and inspecting cement production facilities, and we reviewed pertinent compliance and enforcement documents.

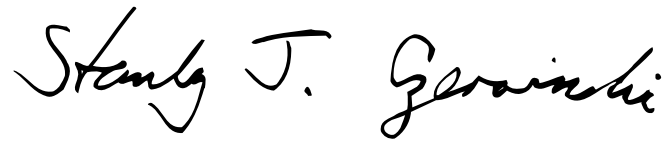
To provide information on the nature and severity of the violations of RCRA's treatment, storage, and disposal and boiler and industrial furnace regulations by fuel blenders and cement producers, we asked state and EPA regional officials to (1) describe or provide examples of any violations that were identified during the most recent inspections of the fuel blending and cement production facilities and (2) characterize these violations as either minor or significant on the basis of each state's or EPA region's criteria for making such determinations or, in lieu of such criteria, their professional judgment.

In conducting our review, we visited two fuel blending facilities in Texas and three cement production facilities in Kansas and Texas, and we interviewed officials at these facilities.

We conducted our review from September 1995 through August 1996 in accordance with generally accepted government auditing standards.

As arranged with your offices, unless you announce its contents earlier, we plan no further distribution of this report until 10 days after the date of this report. At that time, we will send copies to the Administrator, EPA, and the Director, Office of Management and Budget. We will also make copies available to others upon request.

Please call me at (202) 512-6111 if you or your staff have any questions.
Other major contributors to this report are included in appendix V.

A handwritten signature in black ink that reads "Stanley J. Czerwinski". The signature is written in a cursive style with a large, prominent 'S' at the beginning.

Stanley J. Czerwinski
Associate Director, Environmental
Protection Issues

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Abbreviations

| | |
|------|--|
| EPA | Environmental Protection Agency |
| GAO | General Accounting Office |
| PCB | polychlorinated biphenyl |
| RCRA | Resource Conservation and Recovery Act |

Fuel Blending Facilities Are Regulated Under RCRA as Treatment, Storage, and Disposal Facilities

As facilities that store and treat hazardous waste, fuel blenders are subject to the Resource Conservation and Recovery Act's (RCRA) hazardous waste regulations and, therefore, are required to obtain an operating permit, must be inspected to ensure that they are complying with these regulations, and are subject to enforcement action if they violate the regulations.

RCRA established two categories of facilities that treat, store, and/or dispose of hazardous waste: "interim status" facilities, which have not yet obtained an operating permit, and facilities with a permit. Of the 34 fuel blending facilities in the five states included in our review, 11 are operating under interim status requirements and 23 have a final operating permit. Table I.1 shows the number of fuel blending facilities in the five selected states, by the status of their operations.

Table I.1: Operating Status of Fuel Blending Facilities in Five Selected States

| Location of facilities | Status of facilities' operations | |
|------------------------|----------------------------------|-------------------------|
| | In interim status | Operating with a permit |
| Kansas | 0 | 2 |
| Missouri | 4 | 4 |
| Ohio | 4 | 8 |
| Pennsylvania | 2 | 0 |
| Texas | 1 | 9 |
| Total | 11 | 23 |

The Environmental Protection Agency (EPA) developed separate sets of regulations for facilities operating in interim status and with a final operating permit. The standards for facilities operating in interim status¹ consist primarily of practices that owners and operators must follow to properly manage hazardous waste before they obtain an operating permit. The interim status standards include general administrative and nontechnical requirements for securing a site, training personnel, ensuring construction quality, testing and maintaining equipment, and keeping records. In addition, the interim status standards include certain technical requirements that are intended to minimize the potential for threats to the environment and public health. These technical requirements include general standards that apply to several types of facilities, including those for (1) monitoring groundwater, (2) closing a facility and managing the site after the facility is closed, and (3) providing financial assurance. The requirements also include specific standards that apply to each waste

¹40 C.F.R. part 265.

**Appendix I
Fuel Blending Facilities Are Regulated
Under RCRA as Treatment, Storage, and
Disposal Facilities**

management method, including requirements for waste analysis, monitoring and inspection and general operating requirements.

The standards for facilities with an operating permit² consist of performance standards and design and operating criteria that are included in the permit for each facility. These standards include administrative and nontechnical requirements. In addition, facilities with a permit must comply with detailed technical requirements. Each permit must include conditions that are necessary for the facility to comply with RCRA and its regulations. The facility's compliance with RCRA is measured against the conditions included in the permit. The permit may incorporate these requirements by referring to RCRA and EPA's implementing regulations, or it may include specific requirements based on the act and regulations. For example, each facility's permit specifies the hazardous substances that must be monitored in the groundwater near the facility. Groundwater-monitoring requirements are included in the regulations, but many aspects of the monitoring program depend on the site and, therefore, are developed for each facility's permit.

To ensure compliance with their requirements for operating in interim status or with a permit, RCRA requires treatment, storage, and disposal facilities to be inspected at least once every 2 years.

²40 C.F.R. part 264.

Cement Production Facilities Are Regulated Under RCRA as Boiler and Industrial Furnace Units

EPA classifies cement production facilities that burn hazardous waste fuel as industrial furnaces. As such, they are subject to the agency's boiler and industrial furnace regulations under RCRA, which took effect on August 21, 1991. These regulations control emissions of hazardous organic compounds, toxic metals, hydrogen chloride, chlorine gas, and particulate matter from boilers and industrial furnaces burning hazardous waste. In addition, the rule subjects the owners and operators of these facilities to the standards that govern hazardous waste treatment, storage, and disposal facilities in general.

Facilities that were using or had committed themselves to using hazardous waste as a supplemental fuel before the effective date of the rule were allowed to obtain "interim status." This status allows them to continue burning hazardous waste fuels while obtaining the permit required under the rule. In addition to applying for a permit, the owners and operators of interim status facilities were required to submit (1) by August 21, 1991, a report (certification of precompliance) providing information and certifying that emissions of individual metals, hydrogen chloride, chlorine gas, and particulate matter were not likely to exceed allowable levels and (2) by August 21, 1992, a report (certification of compliance) certifying, on the basis of testing, that emissions of individual metals; hydrogen chloride, chlorine gas, and particulate matter; carbon monoxide; and where applicable, hydrocarbons, dioxins, and certain other chemicals did not exceed allowable levels.

During interim status, limits on a facility's operating parameters are established and, after submitting the required certifications, the owner or operator must comply with these limits. To demonstrate compliance, the owner or operator must monitor specified operating parameters of the combustion unit and the nature of the hazardous waste burned, as well as maintain records. Cement production facilities must repeat this testing every 3 years or until they receive their permit.

Of the 11 cement production facilities burning hazardous waste fuels in the five states included in our review, 10 are operating under interim status requirements and only 1 has received its final operating permit. Table II.1 shows the operating status of the cement production facilities burning hazardous waste fuels in the five states included in our review.

**Appendix II
Cement Production Facilities Are Regulated
Under RCRA as Boiler and Industrial
Furnace Units**

**Table II.1: Operating Status of Cement
Production Facilities Burning
Hazardous Waste Fuels in Five
Selected States**

| Location of facilities | Status of facilities' operations | |
|------------------------|----------------------------------|-------------------------|
| | In interim status | Operating with a permit |
| Kansas | 2 | 1 |
| Missouri | 4 | 0 |
| Ohio | 1 | 0 |
| Pennsylvania | 2 | 0 |
| Texas | 1 | 0 |
| Total | 10 | 1 |

In addition to meeting emission standards, facilities operating both in interim status and with a permit must meet general standards and requirements for preparedness for and prevention of releases of hazardous substances, contingency planning and developing contingency procedures, recordkeeping and reporting, facility closure and postclosure care, and financial assurance. Facilities with a permit must also meet corrective action requirements and demonstrate that they can destroy and remove at least 99.99 percent of the principal organic hazardous constituents in the waste stream. This means that out of 1 ton of such elements put into the system, less than 4 ounces can actually be emitted in the stack gas.

EPA makes information from compliance tests by facilities operating both in interim status and with a permit available to the public. Public notification is not required for compliance testing conducted by interim status facilities as part of their periodic certification of compliance with emission standards. However, an EPA regulation that became effective on June 11, 1996, generally requires that the public be notified of a new or interim status facility's trial burn. A trial burn is a test conducted as part of the permitting process to determine the limits on a facility's operating parameters.

Because a cement production facility typically recycles cement kiln dust and feeds it back into the kiln, the concentration of toxic metals in the dust and the total amounts of toxic metals entering the kiln could increase over time. Therefore, the rule requires that the facility take steps, either by monitoring stack emissions or by other means, to ensure that the metals' concentration during certification testing does not change over time and is representative of the highest concentration of metals being fed into the kiln at any time. In addition, a cement production facility in interim status must feed hazardous waste directly into the kiln to ensure the complete destruction of the waste. Cement kiln dust produced by a kiln burning

**Appendix II
Cement Production Facilities Are Regulated
Under RCRA as Boiler and Industrial
Furnace Units**

hazardous waste as fuel may be considered hazardous waste unless the kiln owner or operator demonstrates that the levels of hazardous constituents in the dust are either (1) similar to those found in the dust from kilns that burn conventional fuels or (2) within specified health-based limits.¹

To ensure compliance with its requirements for operating in interim status or with a permit, RCRA requires hazardous waste treatment, storage, and disposal facilities—including cement production facilities burning hazardous waste fuels—to be inspected periodically. According to EPA officials, one of the primary deficiencies that the agency noted during nationwide inspections of cement production facilities burning hazardous waste fuels from 1991 through 1995 was the facilities' inadequate analysis of hazardous waste. To assist the facilities in analyzing their waste, EPA is preparing guidance for incinerators, boilers, and industrial furnaces, which explains in more detail sampling techniques that the facilities can use to analyze their hazardous waste. In early August 1996, EPA was internally reviewing the draft guidance, and EPA officials expected to make the final guidance available to the public by the end of the month.

On April 19, 1996, EPA published a proposed rule in the Federal Register that would set more stringent emission limits for hazardous waste incinerators, lightweight aggregate kilns, and cement production facilities burning hazardous waste fuels. According to EPA, the new standards are designed to reduce dioxin and furan emissions from these sources by 98 percent, mercury emissions by 80 percent, and lead and cadmium emissions by 95 percent. The proposed rule would also place stringent limits on the amounts of hydrochloric acid, chlorine, certain toxic metals, particulate matter, carbon monoxide, and hydrocarbons that facilities burning hazardous waste fuels can emit. The proposal would exempt cement kilns from the new emission standards if their hazardous waste fuels are similar in composition to fossil fuels and pose no greater risks. It would also require the monitoring of emissions. The proposed rule had a 60-day comment period. In May 1996, EPA extended the comment period another 60 days, until August 19, 1996.

¹While EPA has determined that additional measures to control cement kiln dust are warranted for the protection of human health and the environment, the agency has not yet determined what additional measures are needed. Our report entitled Environmental Protection: Interim Actions to Better Control Cement Kiln Dust (GAO/RCED-95-192, Aug. 14, 1995) discusses EPA's plans to develop standards specifically for cement kiln dust and interim actions to control this dust in light of its potential health risks.

Results of the Most Recent Inspections of Fuel Blending Facilities in Five States

Kansas

Kansas officials inspected the state's two fuel blending facilities most recently between October 1995 and April 1996. These inspections identified minor RCRA violations at both facilities, including inadequately labeling waste storage containers and having an inaccurate emergency coordination list. The inspections also identified significant violations at one of the facilities. The facilities' operators have corrected most of these violations and are negotiating with state officials to resolve the remaining issues.

Missouri

Missouri officials inspected the state's eight fuel blending facilities most recently between November 1995 and March 1996. These inspections identified a number of minor RCRA violations at six facilities, including inadequately labeling waste storage containers and documenting inspections. According to state officials, the facilities' operators have corrected many of the identified problems. State inspections also identified significant violations at five facilities, including using storage containers in poor condition, storing hazardous waste in excess of allowed capacity, and inadequately analyzing waste. State officials are working with the facilities' operators to resolve these problems.

Ohio

Ohio officials inspected the state's 12 fuel blending facilities most recently between May 1995 and May 1996. They identified minor violations of RCRA's regulations at eight facilities, including, among others, inadequately labeling waste storage containers and documenting inspections and failing to submit cost estimates for closing facilities and maintaining sites after closure. In addition, they identified significant violations at four facilities, including failing to minimize the possibility of a fire, explosion, or release of waste and not evaluating waste as required. State officials are working with the facilities' operators to resolve the identified problems.

Pennsylvania

Pennsylvania officials last inspected the state's two fuel blending facilities in early 1996. These inspections identified no violations of RCRA's treatment, storage, and disposal regulations at one fuel blending facility and only minor violations at the second facility, including the inadequate labeling of waste storage containers. The facility's operator has corrected these violations.

Appendix III
Results of the Most Recent Inspections of
Fuel Blending Facilities in Five States

Texas

Texas officials last inspected the state's 10 fuel blending facilities between April 1995 and May 1996. While no violations were detected at four of these facilities, the inspectors identified minor RCRA violations at the remaining six facilities, including not submitting all required copies of contingency plans and not conducting all required daily inspections of equipment. These violations have been corrected or are being corrected. The inspections also identified significant violations at one facility, including having deteriorating backup systems for containing hazardous waste leaks. State officials are working with the facilities' operators to resolve these issues.

Results of Recent Inspections of Cement Production Facilities Burning Hazardous Waste Fuels in Five States

Kansas

The state's three cement production facilities burning hazardous waste fuels were most recently inspected by EPA regional officials between October 1995 and April 1996. Potential violations of the boiler and industrial furnace regulations identified at two of the facilities are under review by EPA regional officials. At the third facility, EPA found that several daily and quarterly audits of emission control equipment had not been conducted as required. EPA sent a notice of violation to this facility.

Missouri

Inspections completed between May 1995 and June 1996 identified potential violations at three of the state's four cement production facilities that burn hazardous waste fuels. EPA officials are reviewing the results of these inspections and related information to determine whether violations occurred. An inspection of the remaining facility in the state identified no violations.

Ohio

The report on the April 1996 inspection of the one cement production facility in Ohio that burns hazardous waste fuels has not yet been finalized; therefore, an EPA official told us that the agency could not provide us with information on the inspection's results. According to this official, the report of EPA's inspection of this facility in 1995 is under review by EPA regional staff.

Pennsylvania

EPA officials are currently reviewing information from a December 1995 inspection of one of Pennsylvania's two cement production facilities that burn hazardous waste fuels. The results of a May 1996 inspection of the state's other facility were not available as of July 1996. However, a July 1995 inspection of this facility identified a number of violations, including (1) not conducting required tests of the system that automatically shuts off the flow of hazardous waste fuels into the kiln, (2) not properly operating a system that is to continuously monitor emissions while burning hazardous wastes, and (3) not controlling escaping emissions. EPA has issued a notice of violation to this facility and is negotiating with the facility's operator to resolve these issues.

Texas

Texas officials' most recent inspection in April 1996 of the state's only cement production facility burning hazardous waste fuels identified no violations of the boiler and industrial furnace regulations.

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