

**GAO**

Briefing Report to the Chairman,  
Subcommittee on Commerce,  
Transportation, and Tourism, Committee  
on Energy and Commerce, House of  
Representatives

January 1987

**HAZARDOUS WASTE**

**Enforcement of  
Certification  
Requirements for Land  
Disposal Facilities**



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Resources, Community, and  
Economic Development Division

B-221403

January 27, 1987

The Honorable James J. Florio  
Chairman, Subcommittee on Commerce,  
Transportation, and Tourism  
Committee on Energy and Commerce  
House of Representatives

Dear Mr. Chairman:

As requested in your January 31, 1986, letter, we have reviewed the Environmental Protection Agency's (EPA) enforcement of certain provisions of the 1984 amendments to the Resource Conservation and Recovery Act of 1976 (RCRA). We examined the provisions that apply to hazardous waste land disposal facilities operating under EPA's interim status regulations while awaiting the issuance of an operating permit. The amendments require that owner/operators of such facilities either (1) certify that they are in compliance with RCRA groundwater monitoring and financial responsibility regulatory requirements and apply for an operating permit by November 8, 1985, or (2) lose their interim status, without which they cannot legally operate. Of 1,538 land disposal facilities nationwide, 543 certified compliance with the regulatory requirements by November 8, 1985; 995 facilities did not certify and were therefore required to cease operating and close their facilities.

This briefing report responds to your three specific questions:

- Did EPA target for inspection and take enforcement action against facility owners or operators suspected of submitting false certifications?
- What methods did EPA use to ensure that those facilities that should have ceased operation and closed did so and are not continuing to accept waste?
- What are EPA's plans, procedures, and timetable for making sure facilities that are to close are closed in accordance with applicable regulations and in a timely manner?

As agreed with your staff, we performed our work at EPA headquarters, three EPA regions, and three states. We briefed your staff on the results of our work on September 26, 1986. As requested, this briefing report summarizes the information discussed during that briefing.

We found that at both headquarters and regional levels, EPA targeted certifying facilities for priority inspection or review on the basis of indications that the facilities might have certified falsely. However, partly because of its limited enforcement resources, EPA did not seek to close all certifying facilities that were considered to be out of compliance with groundwater monitoring and/or financial responsibility requirements at the time of certification. We found that EPA did not seek to close facilities when

- Technical complexities made it difficult to prove that a violation existed.
- The violation was minor.
- Facilities were erroneously told by EPA or a state that they were in compliance with the regulatory requirements prior to their certification.

We were told that in such cases EPA's policy is to take enforcement action against facilities to achieve regulatory compliance rather than force them to close. In the 64 cases we reviewed where EPA had made a decision on whether or not to accept certifications, it believed that 12 facilities were clearly in violation of either groundwater monitoring and/or financial responsibility requirements. EPA considered these certifications to be invalid and had taken or is planning to take enforcement action to close these facilities as well as assess penalties against them.

EPA also targeted noncertifying facilities for priority inspection when it suspected that they were operating illegally, that is, after November 8, 1985. EPA generally performed site visits to determine whether these noncertifying facilities had, in fact, ceased operating. Not all the regional offices we visited used the same criteria for targeting facilities, but each region's criteria seemed reasonable. In the 133 cases we reviewed, EPA determined that 23 noncertifying facilities continued to operate after November 8, 1985. EPA had assessed penalties and taken enforcement actions to close some of these facilities and is planning action against the others.

Besides ceasing to accept waste, land disposal facilities that lost interim status on November 8, 1985, must take additional actions to close the facility. Closure methodologies may vary but generally include activities such as removing waste, capping disposal facilities, and decontaminating equipment used to close the facility. Closure is intended to minimize the release of waste into the environment and the need for post-closure care. EPA regulations stipulate a timetable for the submission of closure plans, the approval of these plans by EPA or states authorized by EPA to approve closure plans, and for completing the physical closure at facilities. These regulatory time frames, which were promulgated prior to the 1984 certification requirements, provide that closure be completed within approximately 1 year after a facility loses interim status. For facilities losing interim status on November 8, 1985, closure should have been completed by November 1986.

Closure information developed by various groups within EPA was not always consistent, but showed that EPA's actual closure progress was far behind its regulatory timetable. EPA headquarters data showed that nationally, only 191 closure plans had been approved as of September 1986. In the 3 regions we reviewed, only 2 of the 458 closing facilities had actually been closed by September 1986. EPA estimated that closure work will continue into 1990. Officials in the EPA regions and state agencies generally attributed the delay to limited resources to review and approve the large number of facility closure plans. They also added that in the competition for resources, the issuance of operating permits to land disposal facilities that plan to continue operating has taken precedence over closure plan review because of legislated permitting deadlines--according to the amendments, all operating permits must be issued or denied by November 1988.

We did not assess the impact of the delays in closing noncertifying facilities, nor did we review the basis for EPA's estimate that closure work will continue until at least 1990. While the facilities await closure, they represent a potential environmental hazard and require monitoring by EPA or the states to ensure they are complying with applicable regulations. Because EPA plans to do such monitoring, we are not making any recommendations.

This briefing report is based primarily on discussions with officials at EPA headquarters, 3 EPA regional offices, 3 state agencies, and on our review of about 250 land disposal facility files. The three regions account for approximately 50 percent of the hazardous waste

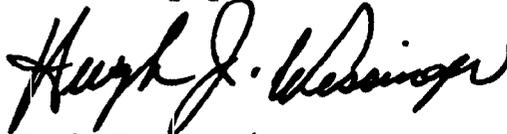
facilities in the nation. The three states account for almost half of the land disposal facilities in each of the three regions. The scope and methodology of this review are explained in detail in section 1.

We discussed our findings with EPA officials and incorporated their comments where appropriate. However, in accordance with your request, we did not request EPA to review and comment officially on a draft of this briefing report.

Unless you publicly release its contents earlier, we will make copies available 30 days after the date of this letter. At that time, copies will be sent to appropriate congressional committees; the Administrator, EPA; the Director, Office of Management and Budget; and other interested parties. Please call me at (202) 275-5489 if you would like additional information on this report.

Major contributors are listed in appendix VII.

Sincerely yours,

A handwritten signature in black ink, reading "Hugh J. Wessinger". The signature is written in a cursive style with a large, prominent initial "H".

Hugh J. Wessinger  
Senior Associate Director

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#### ABBREVIATIONS

CME	Comprehensive Monitoring Evaluation
EPA	Environmental Protection Agency
GAO	General Accounting Office
RCED	Resources, Community, and Economic Development Division
RCRA	Resource Conservation and Recovery Act

STATUTORY CONTROLS OVER  
HAZARDOUS WASTE DISPOSAL FACILITIES

RESOURCE CONSERVATION  
AND RECOVERY ACT

- REQUIRED FACILITIES TO OBTAIN OPERATING PERMITS FROM EPA
- ALLOWED EXISTING FACILITIES TO OPERATE UNDER INTERIM STATUS UNTIL EPA ISSUED THE PERMITS
- IMPOSED NUMEROUS ADMINISTRATIVE AND TECHNICAL REQUIREMENTS TO PROPERLY MANAGE HAZARDOUS WASTE DURING INTERIM STATUS

1984 AMENDMENTS TO RCRA

- ESTABLISHED SPECIFIC TIMETABLES FOR ISSUING PERMITS TO LAND DISPOSAL FACILITIES OPERATING UNDER INTERIM STATUS REGULATIONS AND FOR BRINGING THESE FACILITIES INTO COMPLIANCE WITH GROUNDWATER MONITORING AND FINANCIAL RESPONSIBILITY REQUIREMENTS
  - REQUIRED, BY NOVEMBER 8, 1985, OWNERS/OPERATORS OF LAND DISPOSAL FACILITIES OPERATING UNDER INTERIM STATUS TO
    - APPLY FOR AN OPERATING PERMIT AND
    - CERTIFY COMPLIANCE WITH ALL APPLICABLE GROUNDWATER MONITORING REQUIREMENTS AND FINANCIAL RESPONSIBILITY REQUIREMENTS
- OR
- LOSE INTERIM STATUS AND CLOSE DISPOSAL UNITS
  - REQUIRED EPA TO ISSUE OR DENY OPERATING PERMITS TO APPLYING FACILITIES BY NOVEMBER 8, 1988

## SECTION 1

### INTRODUCTION

The Resource Conservation and Recovery Act of 1976 (RCRA) provides for the regulatory control of hazardous waste land disposal facilities to minimize the potential release of hazardous waste into the environment. One particular requirement under the act was that both existing and future hazardous waste land disposal facilities would be required to obtain operating permits in order to continue accepting and disposing of hazardous waste. RCRA, as amended, provides that facilities in existence on November 19, 1980, would be allowed to continue operating under interim status standards until the Environmental Protection Agency (EPA) could issue permits. On January 31, 1986, the Chairman, Subcommittee on Commerce, Transportation, and Tourism, House Committee on Energy and Commerce, asked us to evaluate EPA's enforcement of the loss of interim status provision of the 1984 Hazardous and Solid Waste amendments to RCRA.

### STATUTORY CONTROLS OVER HAZARDOUS WASTE DISPOSAL FACILITIES

Facilities operating under interim status must comply with numerous administrative and technical requirements. The requirements that are pertinent to this report address groundwater monitoring and financial responsibility.

Groundwater monitoring is intended to assess a facility's impact on the underlying groundwater. The basic regulatory program requires the installation of a monitoring system capable of determining a facility's impact on the quality of groundwater in the uppermost aquifer underlying a facility. In many cases, this requires more than the minimum of at least one well upgradient of the disposal unit (where the groundwater is unaffected by the disposal unit) and at least three wells downgradient of the disposal unit (where the groundwater would be affected by releases from the disposal unit). If samples taken from these wells indicate that the disposal unit is contaminating the groundwater, the facility must assess the severity of the contamination and the extent to which it has spread, and install and sample additional wells as necessary.

There are two distinct financial responsibility requirements. The first requirement is referred to as financial assurance. It requires the facility owner/operator(s) to demonstrate that funds will be available to close their facilities properly and provide necessary postclosure care. The second requirement is liability insurance. It requires owner/operator(s) to demonstrate that funds are available to compensate third parties for bodily injury and property damage

caused by sudden and nonsudden accidental releases of hazardous wastes arising from facility operations.

In amending RCRA in 1984 through the Hazardous and Solid Waste Amendments, the Congress addressed its concerns regarding (1) EPA/state issuance of a limited number of operating permits to hazardous waste facilities and (2) the lack of compliance with the groundwater monitoring and financial responsibility requirements by mandating specific timetables for issuing permits to land disposal facilities continuing to handle hazardous waste and requiring facility owner/operators to certify compliance with regulatory requirements. Specifically, the amendments required that by November 8, 1985,--1 year after their enactment--land disposal facilities were to (1) submit an application for an operating permit and (2) certify that they were in compliance with all groundwater monitoring and financial responsibility requirements applicable to their respective facilities. EPA was given until November 8, 1988, to approve or deny permit applications. Facilities choosing not to apply for a permit and provide the required certifications lost their authorization to dispose of hazardous waste and were to cease operations. Under EPA regulations these facilities were also required to submit a plan by November 23, 1985, to close their facilities, and to complete the closure within the following 12 months.



## OBJECTIVES, SCOPE, AND METHODOLOGY

### OBJECTIVES

WE WERE ASKED TO EVALUATE CERTAIN ASPECTS OF EPA'S STRATEGY FOR ENFORCING THE LOSS OF THE RCRA INTERIM STATUS PROVISION BY RESPONDING TO THREE SPECIFIC QUESTIONS:

- DID EPA TARGET FOR INSPECTION AND TAKE ENFORCEMENT ACTION AGAINST FACILITY OWNERS OR OPERATORS SUSPECTED OF SUBMITTING FALSE CERTIFICATIONS?
- WHAT METHODS DID EPA USE TO DETERMINE WHETHER THOSE FACILITIES THAT SHOULD HAVE CEASED OPERATION AND CLOSED DID SO AND ARE NOT CONTINUING TO ACCEPT WASTE?
- WHAT ARE EPA'S PLANS, PROCEDURES, AND TIMETABLE FOR MAKING SURE THAT FACILITIES ARE CLOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS AND IN A TIMELY MANNER?

### SCOPE AND METHODOLOGY

- WE CONDUCTED OUR WORK AT EPA HEADQUARTERS, THREE EPA REGIONS, AND THREE STATES.
- TO OBTAIN THE REQUESTED INFORMATION, WE REVIEWED EPA'S STRATEGY FOR IMPLEMENTING AND ENFORCING THIS REQUIREMENT AND OTHER RELATED DOCUMENTS. WE ALSO INTERVIEWED RESPONSIBLE EPA HEADQUARTERS, EPA REGIONAL, AND STATE OFFICIALS, AND REVIEWED SELECTED FACILITY FILES.

## OBJECTIVES

On January 31, 1986, the Chairman, Subcommittee on Commerce, Transportation, and Tourism, House Committee on Energy and Commerce, requested that we evaluate EPA's enforcement of the loss of interim status provision of the 1984 Hazardous and Solid Waste amendments to RCRA. Specifically, the Chairman asked us to answer the following questions:

- Did EPA target for inspection and take enforcement action against facility owners or operators suspected of submitting false certifications?
- What methods did EPA use to determine whether those facilities that should have ceased operation and closed did so and are not continuing to accept waste?
- What are EPA's plans, procedures, and timetable for making sure that facilities are closed in accordance with applicable regulations and in a timely manner?

## SCOPE AND METHODOLOGY

As agreed with the Subcommittee staff, we conducted our work at EPA headquarters in Washington, D.C.; EPA regions I (Boston), V (Chicago), and VI (Dallas); and the states of Connecticut, Illinois, and Texas. These regions were judgmentally selected because they account for approximately 50 percent of the hazardous waste land disposal facilities in the nation. We also judgmentally selected these states because they account for almost half of the land disposal facilities in the three selected regions. This selection was not intended to be representative of nationwide conditions, and the results of our review are not projectable; however, our review does provide significant coverage of EPA efforts to enforce the loss of interim status provision.

To obtain general information on the three questions, we reviewed EPA's strategy for implementing and enforcing the loss of interim status amendment to the act and other supporting documents. We also interviewed EPA headquarters and regional officials responsible for implementing the requirement and state officials responsible for overseeing hazardous waste facilities. We did not verify national statistics obtained by EPA headquarters.

To obtain more detailed information on EPA's inspection and enforcement activities against suspected false certifiers and noncertifying facilities that continued to operate, we reviewed EPA files and filled out data collection instruments on all of EPA's targeted facilities in region I and a sample of EPA targets in regions V and VI. In region V we also used data collection

instruments but completed fewer instruments because of time constraints. The instruments at all three regions were completed between May and September 1986. (Our sampling methodology for each region is discussed in appendix I.)

EPA currently considers a false certifier to be an owner/operator who certified compliance, knowing the facility was not in compliance, with the intent to deceive. Criminal enforcement action is appropriate in such cases. EPA currently uses the term "invalid certifier" to describe cases where it has rejected a certification because the facility was not in compliance, although the certification may not have been knowingly and intentionally false. In such cases, EPA takes enforcement action to close the facilities, contending that they lost interim status on November 8, 1985. At times, EPA has used the terms "false certifier" and "invalid certifier" interchangeably. This report will use the above definitions to describe false and invalid certifications.

This report uses the terms "illegal operator" and "illegal operation" to describe cases where facilities continued to operate after November 8, 1985, without having certified compliance with groundwater monitoring and financial responsibility requirements and applied for a permit.

We selected our sample of suspected false certifiers primarily from the certifying facilities that either EPA headquarters or the regions had targeted for priority inspection or review. In this report, inspections are defined as onsite visits by EPA or the state to the facility; reviews refer to file reviews completed by EPA or the state. In addition to the number sampled, we added some facilities for review if, according to EPA or congressional documents, they previously had been identified as having major groundwater monitoring or financial responsibility violations, yet had not been selected as targets for inspection by EPA. The results of this effort are presented in section 3, which addresses our findings on the false certification issue.

We selected our sample of noncertifying facilities suspected of continuing to operate after November 8, 1985 (illegal operators), from the noncertifying facilities that EPA targeted for priority inspection. Some facilities neither certified nor submitted a closure plan. These facilities seemed likely to continue to operate illegally, thus in addition to the number sampled, we added them to our review even though EPA did not target them. Our findings regarding EPA's enforcement actions against identified illegal operators are presented in section 4.

To determine EPA's plans, procedures, and timetable for closing facilities in accordance with applicable requirements and in a timely manner, we obtained closure data from EPA

headquarters, the regions, and the states we visited. We attempted to determine the number of land disposal facilities required to close, the number of closure plans approved, the number of facilities actually closed, and the timetable for completing the closure process. However, we found inconsistencies between EPA headquarters, EPA regional, and state data. Because of time constraints, we were unable to reconcile or verify these data. We therefore used EPA headquarters data for nationwide statistics and regional data for regional statistics. The results of this portion of our review are presented in section 5.

We conducted our work from January 1986 through November 1986 in accordance with generally accepted government auditing standards. We discussed our findings with EPA headquarters and regional staffs. Their comments have been incorporated in the report where appropriate. However, as requested by the Chairman's office, we did not request EPA to officially comment on a draft of this report.

## EPA ENFORCEMENT STRATEGY

EPA DIRECTED ITS REGIONS TO

- COMMUNICATE THE CERTIFICATION REQUIREMENTS TO THE REGULATED COMMUNITY
- DEVELOP INVENTORIES OF FACILITIES THAT
  - CERTIFIED COMPLIANCE AND SUBMITTED AN OPERATING PERMIT APPLICATION
  - DID NOT FULLY CERTIFY
  - DID NOT SUBMIT A CLOSURE PLAN (FOR THOSE NOT CERTIFYING)
- TAKE ENFORCEMENT ACTION AGAINST
  - FACILITIES THAT CERTIFIED BUT HAVE CLEAR REGULATORY VIOLATIONS
  - NONCERTIFIERS THAT CONTINUED TO OPERATE
  - NONCERTIFIERS THAT DID NOT SUBMIT CLOSURE PLANS

## SECTION 2

### EPA ENFORCEMENT STRATEGY

EPA headquarters issued a strategy to the regions on October 16, 1985, for enforcing the loss of interim status provision. It advised the EPA regional offices to (1) notify hazardous waste land disposal facilities by letter of the requirement to certify compliance and submit an operating permit application, or cease accepting hazardous waste as of November 8, 1985, (2) develop inventories of certifying and noncertifying land disposal facilities based on their response to the provision, and (3) take enforcement action against facilities believed to be false certifiers and noncertifying facilities continuing to operate without interim status (illegal operators). Specifically, the headquarters October strategy and additional supporting documents provided the following enforcement guidance:

- Take criminal, civil, or administrative enforcement action, seek closure, and assess penalties against facilities that certify compliance and apply for a permit but have clear violations of groundwater or financial responsibility requirements.
- Take criminal, civil, or administrative enforcement action, seek closure, and assess penalties against facilities that do not certify compliance and apply for a permit but continue operating after November 8, 1985.
- Take enforcement action against facilities that do not certify compliance and apply for a permit and do not submit a closure plan by November 23, 1985.
- Take enforcement action throughout fiscal year 1986 to require land disposal facilities that have marginal groundwater monitoring systems to upgrade their systems.

Table 2.1

NATIONWIDE INSPECTION AND ENFORCEMENT ACTIVITY

	<u>CERTIFIERS</u>	<u>NONCERTIFIERS</u>	<u>TOTAL FACILITIES</u>
LAND DISPOSAL FACILITIES	543	995	1,538
INSPECTED <sup>a</sup>	536	944	1,480
<u>ENFORCEMENT ACTIONS TO CLOSE FACILITIES<sup>b</sup></u>			
FALSE OR INVALID CERTIFIERS		23	
ILLEGAL OPERATORS		62	
ENFORCEMENT ACTIONS TAKEN AGAINST FACILITIES FOR NOT SUBMITTING A CLOSURE PLAN		68	

<sup>a</sup>See appendixes II and III for regional inspection statistics.

<sup>b</sup>See appendixes IV and V for administrative, civil, or criminal enforcement action by region.

Source: EPA headquarters' report dated 11/7/86 on loss of interim status activities.

NATIONWIDE INSPECTION  
AND ENFORCEMENT ACTIVITY

The statistics in table 2.1, compiled by EPA headquarters, provide an overview of the activity that has resulted from the loss of interim status provision:

- Thirty-five percent of the land disposal facilities (543 of 1,538 facilities) certified compliance with groundwater monitoring and financial responsibility requirements and submitted a permit application. The remaining 65 percent (995 facilities) lost their interim status for land disposal units on November 8, 1985, because they did not comply with one or more of the requirements.
- EPA reported that about 96 percent of the land disposal facilities have been inspected since November 8, 1985.
- EPA found that a small proportion of facilities (85, or about 6 percent) certified falsely or invalidly or continued to operate illegally.
- EPA has taken enforcement action to close 33 of the 85 facilities it considered to be false or invalid certifiers or illegal operators. It plans to take enforcement action to close the remaining 52 facilities.
- In addition to the false or invalid certifiers and illegal operators, EPA has taken enforcement action against 68 noncertifying facilities for failure to submit a closure plan.

Table 3.1

EPA TARGETING AND INSPECTION/REVIEW OF  
SUSPECTED FALSE CERTIFICATIONS  
IN REGIONS GAO REVIEWED

	<u>NUMBER OF FACILITIES</u>			
	<u>REG. I</u>	<u>REG. V</u>	<u>REG. VI</u>	<u>TOTAL</u>
TOTAL FACILITIES CERTIFYING (1/3/86) <sup>a</sup>	21	94	159	274
FACILITIES EPA TARGETED FOR INSPECTION/REVIEW	15	67	99	181
<u>GAO's FOCUS</u>				
FACILITIES IN GAO SAMPLE <sup>b</sup>	16	32	68	116
FACILITIES IN GAO SAMPLE INSPECTED/REVIEWED BY EPA AFTER CERTIFICATION	15	32	48	95

<sup>a</sup>The January figures are included in this table because they were EPA's first available data on certifier status and the data on which we based our sample selection.

<sup>b</sup>Includes facilities we added to the EPA targeted suspected false certifiers as explained in section 1.

### SECTION 3

#### EPA TARGETING, INSPECTION/REVIEW, AND ENFORCEMENT ACTIONS AGAINST SUSPECTED FALSE CERTIFIERS

Table 3.1 shows that in the regions we reviewed, EPA targeted 181, or about 66 percent, of the facilities that certified they were in compliance with applicable groundwater monitoring and financial responsibility requirements for inspection or review for suspected false certification. At the close of our field work, the EPA regions had inspected or reviewed about 82 percent of the certifying facilities we included in our review.

#### EPA TARGETED FOR INSPECTION/REVIEW FACILITIES SUSPECTED OF FALSELY CERTIFYING

In addition to its October 1985 implementation strategy discussed in section 2, EPA headquarters provided the regions with additional information to aid them in targeting suspected false certifiers in January and February 1986. The October 1985 guidance instructed the regions to identify, before November 8, 1985, facilities that could not certify because they had clear violations of groundwater monitoring or financial responsibility requirements. While headquarters did not define a clear violation in this guidance, it did provide examples of what would be clear violations--for example, no wells, no financial assurance, and a "clearly inadequate well system." According to the headquarters' strategy, the regions were to have determined the certification status of their targets by December 5, 1985.

On January 30, 1986, headquarters supplemented this earlier guidance by supplying the regions with summary data showing compliance status, primarily for groundwater monitoring, of individual hazardous waste facilities in each region. Headquarters asked the regions to immediately review the certifications of those facilities shown in the summaries as having had compliance problems. On February 14, 1986, headquarters sent out a second list, which focused on facilities suspected of not having liability insurance, and instructed the regions to review the lists of facilities for possible false certifiers as well.

Region I generally followed headquarters' October guidance for targeting false certifiers. In all, 15 of 21 facilities that certified were targeted for inspection or review by EPA headquarters or the regions as suspected false certifiers. From mid-October through January 1986, 11 of the 15 were targeted by the region through state file reviews and interviews with state personnel. The remaining four facilities, although not identified by the region, we included in EPA headquarters' January list of suspected false certifiers.

Overall, 67 of the 94 certifiers in region V were targeted by headquarters or the region. In September-October 1985, region V conducted its annual effort to identify facilities in significant noncompliance with groundwater monitoring or financial responsibility requirements. This process identified no facilities with such "blatant" groundwater monitoring violations (e.g., no groundwater monitoring wells) that they would be targets for immediate enforcement if they certified. In February 1986 the region compared its list of certifiers with its list of facilities having significant violations and identified 46 facilities that were suspected false certifiers. The headquarters lists contained an additional 21 potential false certifiers bringing the total targets in the region to 67.

Overall, 99 of the 159 certifiers in region VI were targeted by headquarters or the region. Region VI also generally followed the October 1985 guidance. Before the November 8, 1985, certification deadline, the region identified 26 facilities it suspected of having significant groundwater monitoring problems--specifically no monitoring wells. However, only five of these facilities actually certified.

All three regions maintained that by February 1986, they had more current information on their certifiers than that provided by EPA headquarters in its January and February lists of facilities with potential groundwater or financial liability problems. Because they believed their information to be more current, they did not find these lists helpful in identifying suspected false certifiers.

MAJORITY OF THE SUSPECTED  
FALSE CERTIFIERS INSPECTED/REVIEWED

Of the 116 certifying facilities that we reviewed,<sup>1</sup> the EPA regions had inspected/reviewed 95, or about 82 percent. Region I had not reviewed one facility in our sample after the facility certified because an earlier state inspection found the facility to be in compliance with groundwater monitoring regulations. Region V had reviewed all facilities in our sample.

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<sup>1</sup>As explained in section 1, we included some facilities in our sample that were not targeted by EPA headquarters or the regions. Our inclusion of additional facilities was based on information available to us through a prior congressional report.

Region VI had not reviewed 20 facilities in our sample, primarily because the region did not consider them high inspection priorities. Most of the 20 facilities appeared on EPA headquarters' suspected false certifier lists, which the region believed to be inaccurate or outdated. According to regional officials, region VI plans to inspect all certifying facilities by the end of fiscal year 1987.

Table 3.2

EPA FINDINGS REGARDING SUSPECTED FALSE CERTIFIERS

<u>EPA CERTIFICATION DECISIONS</u>	<u>NUMBER OF FACILITIES</u>			
	<u>REGION I</u>	<u>REGION V</u>	<u>REGION VI</u>	<u>TOTAL</u>
CERTIFICATION ACCEPTABLE	13	26	13	52
CERTIFICATION INVALID	2	3	7	12
TOTAL CERTIFICATION DECISIONS (9/1/86)	<u>15</u>	<u>29</u>	<u>20</u>	<u>64</u>
NO EPA DECISION	1	1	44	46
OTHER <sup>a</sup>	0	2	4	6
TOTAL REVIEWED BY GAO	<u>16</u>	<u>32</u>	<u>68</u>	<u>116</u>

<sup>a</sup>Includes facilities that were incorrectly classified as certifiers and facilities that certified but were later found not to have RCRA-regulated land disposal units. A certification decision is not required in these cases.

EPA FINDINGS REGARDING  
SUSPECTED FALSE CERTIFIERS  
REVIEWED BY GAO

At the time of our review, EPA had decided to accept or reject certifications for 64 of the 116 facilities we reviewed. Of these 64 facilities, 52 of the certifications had been accepted. As discussed later in this section, EPA has taken or plans to take enforcement action to close the remaining 12 facilities for invalid certification.<sup>2</sup>

Table 3.2 shows that regions I and V have made decisions on nearly all facilities we reviewed. However, according to region I and V officials, some of their decisions to accept certifications could be changed. If a future inspection/review uncovers significant groundwater monitoring and/or financial responsibility violations, the regions might revise their earlier determination and pursue an enforcement action for invalid certification. As a region I attorney noted, the region does not send out official notices informing facilities that their certifications were accepted and that the false certification issue is closed.

Region VI had made certification decisions for 20 of the 68 facilities we reviewed. These were considered final decisions by region VI officials. Generally, region VI waited for the results of inspections at the 44 facilities with no certification decision, or assigned the facilities a low inspection priority on the basis of its knowledge of the facilities. Region VI did not expect to complete its certification decisions until fiscal year 1987.

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<sup>2</sup>See p. 14 for definition of invalid certification.

Table 3.3

TYPES OF POTENTIALLY INVALID CERTIFICATIONS  
DISCOVERED BY EPA AT FACILITIES IN GAO REVIEW

<u>POTENTIAL VIOLATIONS</u>	<u>NUMBER OF FACILITIES</u>			
	<u>REGION I</u>	<u>REGION V</u>	<u>REGION VI</u>	<u>TOTAL</u>
GROUNDWATER MONITORING ONLY	0	0	4	4
FINANCIAL RESPONSIBILITY ONLY	1	2	2	5
GROUNDWATER MONITORING AND FINANCIAL RESPONSIBILITY	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>
TOTAL	<u>2</u>	<u>3</u>	<u>7</u>	<u>12</u>

TYPES OF POTENTIALLY INVALID  
CERTIFICATIONS

At the time of our review, the regions we visited had determined that 12 of the cases we reviewed warranted enforcement action for invalid certification. EPA believed that at 4 of the 12 facilities, the owner/operators invalidly certified compliance with groundwater monitoring requirements and at 5 of the 12, the owner/operator(s) did not comply with financial responsibility requirements. In the remaining three cases, EPA believed the owner/operator(s) invalidly certified compliance with both the groundwater monitoring and financial responsibility requirements. The circumstances of the groundwater monitoring cases varied significantly, as shown by the following examples:

- In February 1985 a state ordered an owner/operator to install a specific groundwater monitoring system. The EPA region told the state and the facility that the state-ordered system would not meet RCRA requirements because it provided only two wells rather than the minimum three wells downgradient of each disposal unit. The facility owner/operator installed the state-ordered system and certified compliance on November 8, 1985. EPA determined that the certification was improper and ordered the owner/operator to immediately close the disposal unit.
- In October 1985 a state told a facility owner/operator to upgrade its groundwater monitoring system. The owner/operator had not done so in November 1985 when it certified compliance. The EPA region was pursuing civil enforcement action to close the disposal unit.
- In April 1986 an EPA region found that a certifying facility did not have a groundwater monitoring program. The owner/operator claimed it did not need one because its waste was not hazardous. EPA rejected the owner/operator's argument and, as of September 1986, was drafting an administrative order to close the disposal unit.

EPA believed that the owner/operators of eight facilities we reviewed invalidly certified compliance with the financial responsibility requirements. In four of these cases, EPA believed the certification was invalid only because the facilities lacked or had inadequate liability insurance for third-party injury. In one case, EPA believed the facility owner/operator had inadequate financial assurance for closure only, and in the three remaining cases, EPA identified problems with both liability insurance and financial assurance.

Table 3.4

EPA ENFORCEMENT ACTIONS  
TO CLOSE FACILITIES  
(at the time of our review)

	<u>NUMBER OF ACTIONS</u>			
	<u>REGION I</u>	<u>REGION V</u>	<u>REGION VI</u>	<u>TOTAL</u>
NUMBER OF POTENTIALLY INVALID CERTIFIERS IDENTIFIED	2	3	7	12
<u>TYPE OF ACTION</u>				
ADMINISTRATIVE ORDERS PLANNED	0	0	3	3
ADMINISTRATIVE ORDERS ISSUED	<u>1</u>	<u>0</u>	<u>4</u>	<u>5</u>
TOTAL ADMINISTRATIVE ORDERS	<u>1</u>	<u>0</u>	<u>7</u>	<u>8</u>
CIVIL CASES BEING DEVELOPED IN THE REGIONS	1	2	0	3
CIVIL CASES REFERRED TO EPA HEADQUARTERS	0	1	0	1
CIVIL CASES REFERRED TO OR FILED BY THE DEPARTMENT OF JUSTICE	0	0	0	0
CIVIL CASES DECIDED	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL CIVIL CASES	<u>1</u>	<u>3</u>	<u>0</u>	<u>4</u>

EPA ENFORCEMENT ACTIONS  
AGAINST POTENTIALLY INVALID CERTIFIERS  
REVIEWED BY GAO

In addition to civil or administrative actions, EPA can seek criminal sanctions for knowing and willful false certifications. If EPA cannot establish knowledge and intent to falsely certify, it can still take civil or administrative action to close the facility. In these cases EPA would consider the facility to have "invalidly" certified rather than "falsely" certified.

In the 12 cases we reviewed in which EPA believed a certification was invalid, the agency has taken or is planning to take enforcement action to close the facility. In some cases, the EPA regional offices have issued administrative orders. In others, the regions were developing civil cases for referral to the Department of Justice to file suit in the courts. None of the 12 cases was being developed for criminal prosecution.<sup>3</sup> According to a branch chief in the Office of Waste Programs Enforcement, EPA's special investigations center has reviewed each case for possible criminal prosecution. However, the agency has not sought criminal penalties against any of the 12 facilities primarily because not enough evidence exists to prove that a certification was intentionally false.

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<sup>3</sup>However, region V had one other case that had been referred to EPA headquarters for possible criminal action for falsely certifying.

EPA ACCEPTANCE OF A CERTIFICATION DOES NOT MEAN A FACILITY IS IN FULL COMPLIANCE WITH GROUNDWATER MONITORING AND FINANCIAL RESPONSIBILITY REQUIREMENTS BECAUSE

- EPA MAY NOT HAVE SUFFICIENT INFORMATION TO KNOW WHETHER A FACILITY IS IN FULL COMPLIANCE WITH GROUNDWATER MONITORING REGULATIONS.
- EPA SOMETIMES DECIDES CERTIFICATIONS ARE ACCEPTABLE EVEN WHEN IT BELIEVES A FACILITY IS NOT IN FULL COMPLIANCE WITH RCRA REGULATIONS.

EPA'S ACCEPTANCE OF A  
CERTIFICATION DOES NOT MEAN A  
FACILITY IS IN FULL COMPLIANCE

EPA's acceptance of a facility's certification does not mean the facility is in full compliance with groundwater monitoring and financial responsibility requirements. As previously discussed, EPA determined that 52 of the facilities we reviewed had submitted acceptable certifications. Although our review was not intended to yield comprehensive data on the compliance status of each facility, we noted that at least 16 of the 52 facilities had compliance problems, usually related to groundwater monitoring.

Certification acceptance does not always imply full compliance with RCRA regulations, for two reasons. First, EPA may not have sufficient information to know whether a facility is in full compliance with groundwater monitoring regulations. In 8 of the 52 cases we reviewed in which EPA found that the groundwater portion of the certification was acceptable, the facilities had not had a comprehensive monitoring evaluation (CME), which is an in-depth groundwater monitoring inspection conducted by EPA or the state.<sup>4</sup> In other cases where the facilities had had CMEs, they had been done over a year before the certification deadline, and the compliance situation at those facilities may have changed. Moreover, very few facilities had had an EPA Hazardous Waste Groundwater Task Force review, which EPA headquarters considers the best means of determining the adequacy of a facility's groundwater monitoring system and is more intensive than a CME.

Second, EPA sometimes decided that certifications were acceptable even when it believed a facility was not in full compliance with RCRA regulations. According to attorneys from EPA's Office of General Counsel and Office of Enforcement and Compliance Monitoring, EPA has the authority to seek closure of any certifying facility that was not in full physical compliance with applicable groundwater monitoring or financial responsibility requirements when it certified. In practice, however, EPA headquarters gave the regions broad discretion in deciding when to exercise EPA's legal authority to seek closure of facilities with inadequate groundwater monitoring systems. According to its October 1985 enforcement strategy, a region should try to close its facility only when the regional office and the authorized state agree that there is "a strong, consistent case" against a facility with an inadequate well system. For example, the strategy states that when a region and state disagree on well system adequacy, or when other factors

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<sup>4</sup>See appendix VI for a regional breakdown of facilities with CMEs.

indicate that a hearing officer or court would not order closure, a region should try to bring the facility into compliance with applicable regulations rather than take enforcement action to close the facility. We found no other headquarters guidance providing criteria on when to seek closure.

The EPA regions we visited said their decisions to seek closure are made on a case-by-case basis. They provided several reasons as to why they do not always choose to seek closure of facilities that are not in compliance, including the following:

1. The seriousness of the violation.
2. Enforcement resources are limited and EPA chooses to use them on cases it believes it stands a good chance of winning in court, and when the benefits of winning are commensurate with the resources invested.
3. Groundwater monitoring is technically complex and noncompliance is sometimes difficult to prove.
4. The lack of strict RCRA enforcement by EPA or the states before the November 1985 certification deadline has hurt EPA's ability to successfully challenge facility certifications. When noncompliance has been approved, either implicitly or explicitly, EPA believes it is hampered in developing the "strong consistent case" that is necessary to close a facility that falsely certified.

According to region I officials, actions to force closure require extensive staff time. Therefore, in deciding whether to seek closure, they weighed the potential benefits and likelihood of success against the cost of diverting staff from other activities. Region I officials stated that if they identified a groundwater monitoring violation and the state agreed, and either EPA or the state had told the facility it was in violation prior to certification, the region would probably seek closure. However, if a violation was unclear because of the technical nature of groundwater monitoring, or if EPA or the state did not tell a facility's owner/operator that it was in violation, region I officials said they would probably seek compliance through enforcement action rather than closure. For example,

- On the basis of an August 1985 file review, EPA determined that a facility had an adequate groundwater monitoring well system, but its sampling and analysis plan did not comply with RCRA regulatory requirements. EPA also determined that the state considered the facility's sampling and analysis plan to be in compliance. In November 1985 the facility certified compliance. EPA did not seek closure because it believed that this case would be difficult to win because

EPA and the state disagreed on whether the facility was in compliance. However, EPA plans to order the cleanup of existing hazardous waste releases from the facility.

The region also decided not to seek closure in cases where facilities were not in compliance with the RCRA financial responsibility requirements because the state allowed them to meet less stringent requirements:

- Two certifying facilities, both municipal landfills, did not meet RCRA financial responsibility requirements. Neither had adequate liability insurance and one had inadequate financial assurance. However, the state in which they are located exempted municipalities from liability insurance requirements and imposed only limited financial assurance requirements. EPA authorized the state to operate the RCRA program when the facilities certified, so the facilities certified compliance with state regulations. Therefore, although EPA questioned the state's financial requirements, it determined that the facilities' certifications were valid.

The chief of the RCRA enforcement section in region V also said EPA would seek closure only when it believed it could win the case. Because groundwater monitoring is a complex issue involving technical judgment, he said the region believed it had little chance of closing the facility unless a facility has clearly not met the minimum RCRA requirements of one well upgradient and three wells downgradient. He also stated that if a violation was less clear, an EPA effort to close the facility could become a "battle of experts" that EPA would probably lose. As a general policy, unless a facility has "blatant" violations, region V seeks compliance rather than closure when certifying facilities have violations. Region V believed it would provide greater environmental protection in the long run by requiring these facilities to upgrade their groundwater monitoring systems rather than being caught up in a battle with the facility if the region tried to close it down. For example,

- EPA found that a certifying facility was sampling in the second aquifer rather than the uppermost aquifer, as the regulations require. EPA decided to try to bring the facility into compliance by issuing an administrative order rather than try to close the facility, because the facility would likely dispute what constituted the uppermost aquifer.

Region VI officials said they would generally seek closure if the facility had less than one upgradient and three downgradient wells or inadequate well placement, or failed to upgrade its groundwater monitoring system when the facility determined it was leaking hazardous wastes into the groundwater. Regional

officials noted, however, that inadequate groundwater monitoring decisions were frequently very technical and judgmental. As a result, the region did, at times, accept groundwater monitoring certifications knowing that facilities have groundwater monitoring violations. One factor the region considered in deciding whether to accept the certification was whether the facility knew it was in violation with the groundwater monitoring requirements at the time it certified. For example,

- A facility installed additional groundwater monitoring wells prior to November 8, 1985, in order to assess the extent of groundwater contamination at the facility. An April 1986 EPA inspection determined that the facility had a sufficient number of wells but that the well placement was inadequate, and thus the system could not adequately determine the rate and extent of hazardous waste contamination in the groundwater. Because the facility believed it was in compliance at the time it certified, EPA did not require the facility to close. Rather, the state required the facility to develop an adequate groundwater monitoring system capable of assessing the rate and extent of migration of hazardous waste as part of an overall plan to clean up the contamination.

With regard to financial assurance certifications, the EPA regions we visited told us that they have reviewed or plan to review the financial assurance documents to ensure that (1) their wording is generally correct, (2) calculations in the documents are correct, (3) the amount of financial assurance is updated annually for inflation, and (4) the documents are submitted on time. However, regional officials said their certification reviews did not encompass reviews of the closure plans and the associated closure cost estimates, which determined the amount of financial assurance that would be required. As a result, EPA's acceptance of a facility's financial assurance certification does not necessarily mean that the facility has provided for sufficient resources to close it properly at a future date.

## OBSERVATIONS

Although the regions we reviewed used different methodologies to target facilities for inspection/review, EPA's approach to targeting and inspecting suspected false certifiers seems reasonable. As suggested in EPA's October 1985 enforcement strategy, all three regions we visited had identified prior to November 8, 1985, facilities that should not certify, generally because of groundwater monitoring violations. The regions continued throughout the year to target and inspect/review facilities whose owner/operator(s) were suspected of falsely certifying compliance with either the groundwater monitoring or financial responsibility requirements. We found that 82 percent of the 116 facilities we reviewed had been inspected/reviewed after November 8, 1985.

Of the 116 facilities, EPA had made certification decisions on 64 facilities. (EPA has made no decision at 46 facilities and an additional 6 facilities required no decision.) Of these 64 facilities, 52 certifications were accepted and 12 were believed to be invalid by EPA. EPA had taken or plans to take enforcement action to close these 12 facilities.

It is important to note, however, that EPA's acceptance of a facility's certification does not necessarily mean the facility is in full compliance with the regulatory requirements. Although EPA attorneys stated that EPA has the authority to seek closure of any facility not in full physical compliance with applicable groundwater monitoring and financial responsibility requirements when it certified, in practice EPA headquarters has given the regions broad discretion in deciding when to seek closure of facilities with known compliance problems. For example, according to its October 1985 enforcement strategy, unless the regional office and the authorized state agree that there is a "strong, consistent case" against a facility with an inadequate groundwater monitoring system, the region should try to bring the facility into compliance rather than attempt to close it. In the regions we reviewed, we found that decisions to seek closure or allow a facility to continue operating (even though groundwater monitoring compliance problems may exist) were being made on a case-by-case basis, taking into consideration factors such as (1) the seriousness of the violation, (2) EPA's desire to use its limited enforcement resources effectively, i.e., in cases it believes it can win and in which the benefits of winning are commensurate with the resources invested, (3) the technical complexity of the groundwater monitoring requirements and the fact that noncompliance is sometimes difficult to prove, and (4) the lack of strict RCRA enforcement by EPA or the states prior to November 8, 1985. Additional in-depth inspections and reviews of facilities where the regulatory compliance is not clear are required before the actual regulatory compliance of these facilities can be established.

Table 4.1

EPA TARGETING AND INSPECTION  
OF SUSPECTED ILLEGAL OPERATORS

	<u>NUMBER OF FACILITIES</u>			<u>TOTAL</u>
	<u>REGION I</u>	<u>REGION V</u>	<u>REGION VI</u>	
TOTAL FACILITIES NOT CERTIFYING (1/3/86) <sup>a</sup>	120	165	168	453
FACILITIES EPA TARGETED FOR INSPECTION	22	119	30	171
<u>GAO's FOCUS</u>				
FACILITIES IN OUR SAMPLE <sup>b</sup>	45	26	62	133
NONCERTIFIERS IN OUR SAMPLE INSPECTED BY EPA AFTER 11/8/85 <sup>c</sup>	42	19	47	108

<sup>a</sup>The January figures are included in this chart because they were EPA's first available data on noncertifier status and were the data on which we based our sample selection.

<sup>b</sup>Sample drawn from EPA targets plus facilities we added.

<sup>c</sup>Inspected through site visits and physical observation.

## SECTION 4

### EPA TARGETING, INSPECTION, AND ENFORCEMENT ACTIONS AGAINST FACILITIES SUSPECTED OF ILLEGALLY OPERATING

In the regions we reviewed, EPA targeted for inspection about 38 percent of the noncertifying facilities. At the close of our fieldwork, the EPA regions had inspected about 81 percent of the noncertifying facilities that we included in our review.

#### EPA TARGETED FOR INSPECTION FACILITIES SUSPECTED OF ILLEGALLY OPERATING

In the three regions we reviewed, a total of 453 facilities did not certify that they were in compliance with groundwater monitoring and financial responsibility requirements. By not certifying, these facilities lost their authorization to dispose of hazardous waste and were to cease disposal operations immediately and submit a closure plan by November 23, 1985. Approximately 38 percent of these facilities (171 facilities) were targeted for priority inspection by EPA. Some of the facilities were targeted by the regional offices and some by EPA headquarters on its February list of facilities suspected of not having liability insurance provided to the regions.

The EPA regions we visited had conducted onsite inspections at 108 facilities, or 81 percent of the facilities included in our sample. In most of the remaining 25 cases in which EPA had not inspected a facility after November 8, 1985, the regions had information, such as a prior inspection showing that the facility had ceased operations or did not dispose of hazardous waste, that indicated the facility did not operate illegally after November 8, 1985. As for the others, EPA headquarters officials stated that all land disposal facilities should be inspected annually, and they expect all such facilities to receive inspections by the end of fiscal year 1986.

In mid-November 1985, region I staff identified and targeted for priority inspection active facilities that did not certify but had "compelling reasons" to continue operating past November 8. The staff based its selections on file reviews completed during August and September 1985, and on information gathered during more recent inspections. Region I did not use headquarters' February information to develop its target list because by the time the region had received the list, it had already inspected all of headquarters' targets. Forty-two of the 45 noncertifying

facilities we included in our review as suspected illegal operators had been inspected by the region. The region had determined through earlier inspections or reviews that one of the remaining three facilities had stopped operating before November 8, 1985, and that two did not have a RCRA-regulated unit.

In region V EPA primarily targeted 94 noncertifiers that did not respond to a letter of inquiry EPA sent to each facility on November 1, 1985, asking it to provide the operating status and other information on its land disposal units. At the time of our review, inspections were completed at 73 percent of the facilities in our sample.

Region VI identified noncertifiers that did not submit a closure plan as high priorities for inspections. Although it inspected 76 percent of the 62 noncertifiers in our sample (47 facilities), region VI had not inspected 15 of our targeted facilities. Of these 15 facilities, the region had determined without conducting physical inspections that 2 facilities operated illegally after November 8, 1985, 3 ceased accepting waste, and 8 were not RCRA-regulated. The remaining two facilities needed to be inspected before a determination could be made.



Table 4.2

EPA FINDINGS REGARDING  
SUSPECTED ILLEGAL OPERATORS

	<u>NUMBER OF FACILITIES</u>			
	<u>REGION I</u>	<u>REGION V</u>	<u>REGION VI</u>	<u>TOTAL</u>
FACILITY STOPPED ACCEPTING HAZARDOUS WASTE ON OR BEFORE 11/8/85	39	10	44	93
FACILITY CONTINUED TO ACCEPT HAZARDOUS WASTE AFTER 11/8/85	4	15	4	23
UNDETERMINED <sup>a</sup>	<u>2</u>	<u>1</u>	<u>14</u>	<u>17</u>
TOTAL IN OUR REVIEW	<u>45</u>	<u>26</u>	<u>62</u>	<u>133</u>

<sup>a</sup>EPA had not inspected some of these facilities between 11/8/85 and the time of our review. It had inspected others, but needed more information to make a determination. For example, a facility might have operated a disposal unit after 11/8/85, but EPA did not know whether the waste was hazardous.

EPA FINDINGS REGARDING  
SUSPECTED ILLEGAL OPERATORS  
IN GAO REVIEW

A majority of noncertifying facilities in our review (93 of 133, or 70 percent) were found to have stopped accepting hazardous waste before November 8, 1985, as required. EPA has taken or is planning administrative or civil action to close 23 facilities that were found to be accepting waste illegally after November 8, 1985.<sup>5</sup> EPA had not yet determined whether 17 facilities continued to operate primarily because they either had not determined whether the facilities' waste was hazardous or they had not yet inspected the facility at the time of our review.

Table 4.2 could be interpreted to mean that region V had an unusually high percentage of illegal operators. Our review shows that 15 of the 26 suspected illegal operators (about 58 percent) included in our region V sample were found to have accepted hazardous wastes after November 8, 1985. This percentage is high because we reviewed a limited number of facilities in region V because of time constraints on completing our work, and deliberately concentrated on the facilities that had an enforcement action taken or pending against them for illegally operating.

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<sup>5</sup>We noted that in at least four cases, facilities wanted to certify compliance and continue operating legally, but they could not get liability insurance. Lack of liability insurance has been a concern in the hazardous waste industry.

Table 4.3

ENFORCEMENT ACTIONS TO CLOSE FACILITIES  
(as of September 1986)

	<u>NUMBER OF ACTIONS</u>			
	<u>REGION I</u>	<u>REGION V</u>	<u>REGION VI</u>	<u>TOTAL</u>
NUMBER OF ILLEGAL OPERATORS IDENTIFIED	4	15	4	23
<u>TYPE OF ACTION</u>				
ADMINISTRATIVE ORDERS PLANNED	0	0	1	1
ADMINISTRATIVE ORDERS ISSUED	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>
TOTAL ADMINISTRATIVE ORDERS	<u>1</u>	<u>1</u>	<u>2</u>	<u>4</u>
CIVIL CASES BEING DEVELOPED IN THE REGIONS	0	2	0	2
CIVIL CASES REFERRED TO EPA HEADQUARTERS	0	1	1	2
CIVIL CASES REFERRED TO OR FILED BY THE DEPARTMENT OF JUSTICE	3	11	1	15
CIVIL CASES DECIDED	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL CIVIL CASES	<u>3</u>	<u>14</u>	<u>2</u>	<u>19</u>

EPA ENFORCEMENT ACTIONS  
AGAINST POTENTIAL ILLEGAL  
OPERATORS REVIEWED BY GAO

According to EPA headquarters and regional officials, it is generally easier for EPA to demonstrate that a facility is operating illegally than to prove that a facility owner/operator falsely or invalidly certified because illegal operation does not usually involve as much subjective, technical judgment. EPA can usually determine whether a facility is operating illegally from visually inspecting the regulated units.

In each of the 23 cases we reviewed where EPA identified the facility owner/operator as an illegal operator, EPA has taken or plans to take enforcement action to close the facility. In 19 of the 23 cases, the regions have developed civil cases, which they have referred to the Department of Justice for prosecution in the courts. In four cases, the EPA regional offices have issued or plan to issue administrative orders to force closure.

## OBSERVATIONS

Although the regions we reviewed all used different methodologies to target and inspect illegal operators, as they did with false certifiers, EPA's approach to targeting and inspecting illegal operators seems reasonable. We found that 81 percent of the 133 facilities in our review had been inspected at the time of our review and, according to EPA headquarters officials, all were to be inspected by the end of fiscal year 1986. EPA identified 23 facilities in our review that continued to accept hazardous wastes after November 8, 1985, and had taken or plans to take enforcement action to close all of these facilities.



CLOSURE OF NONCERTIFYING  
FACILITIES

CLOSURE

- OWNER/OPERATOR STOPS PUTTING HAZARDOUS WASTE IN THE LAND DISPOSAL UNIT
- OWNER/OPERATOR CLOSES THE LAND DISPOSAL UNIT BY
  - REMOVING THE HAZARDOUS WASTE OR
  - LEAVING THE WASTE IN PLACE AND CAPPING THE UNIT TO MINIMIZE THE MIGRATION OF WASTE
- DOES NOT NECESSARILY ELIMINATE THE POTENTIAL FOR FUTURE ENVIRONMENTAL DAMAGE NOR DOES IT RELEASE THE OWNER/OPERATOR FROM FUTURE CLEANUP RESPONSIBILITY
- DOES NOT NECESSARILY INCLUDE CORRECTIVE ACTION ASSESSMENTS AND ANY RESULTING CLEANUP

## SECTION 5

### EPA PROGRESS IN CLOSING LAND DISPOSAL FACILITIES THAT LOST INTERIM STATUS ON NOVEMBER 8, 1985

EPA regulations specify timetables for closing treatment, storage, and disposal facilities. Specifically, all land disposal facilities that did not certify by November 8, 1985, must have their closure plans approved and disposal units closed by November 23, 1986. Closure progress is far behind EPA's regulatory timetable, according to EPA headquarters, regional, and state officials with whom we spoke.

#### CLOSURE

Closure is the period when the facility owner/operator stops using a RCRA-regulated land disposal unit and actually closes the unit by removing the waste or leaving the waste in place and capping the unit. Either option includes decontaminating or disposing of equipment and structures. If the waste is left in place, the owner/operator must provide for postclosure maintenance care and groundwater monitoring for 30 years.

The closure of a unit is carried out according to an EPA- or state-approved closure plan, which includes a description of how the facility will be closed and a schedule that the facility will follow for its closing. When closure activities are completed, a professional engineer and the owner/operator must certify that the facility was closed in accordance with the closure plan. According to EPA regulations, facilities must continue to comply with RCRA interim status regulatory requirements until closure has been completed. EPA inspection guidance to the regions and states requires continuing inspections of facilities until the closure process is complete.

Closure does not (1) mean that a facility cannot cause future environmental harm, (2) necessarily include the cleanup of all hazardous waste releases, or (3) relieve the owner/operator of responsibility for future cleanup.

#### CORRECTIVE ACTION

Corrective action is a RCRA provision that authorizes EPA to require owners/operators of treatment, storage, and disposal units to clean up hazardous releases. In practice, this often means the cleanup of groundwater contamination. For example, if groundwater is contaminated, it can take up to 20 years to treat it and return it to an acceptable condition.

Under corrective action, EPA, the states, or the owner/operator must determine whether there is a release at a facility, characterize the nature and extent of the release, develop, if appropriate, alternatives for cleanup, and implement the cleanup plan. In October 1986 EPA issued a draft strategy for comment outlining a proposed approach for implementing a corrective action program. In fiscal year 1987, EPA plans to determine whether releases have occurred at all operating land disposal facilities and 30 percent of the closing land disposal facilities. Determinations will be made at all closing facilities by fiscal year 1990, according to EPA projections. These determinations are the initial step in deciding if corrective action is necessary.



Table 5.1

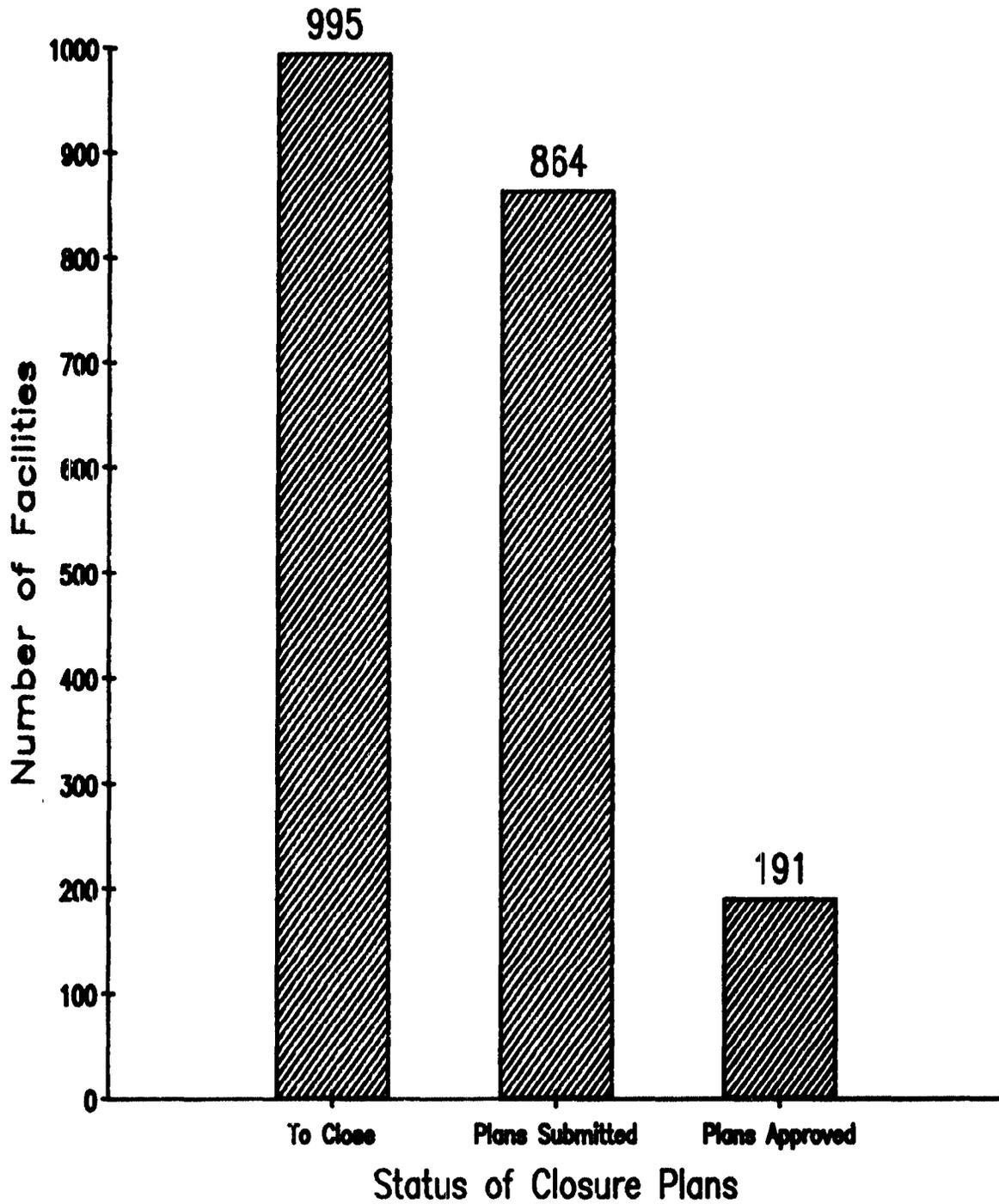
EPA CLOSURE TIMETABLE  
FOR FACILITIES LOSING INTERIM STATUS

<u>TIME TO COMPLETE ACTION</u>	<u>ACTION</u>	<u>DEADLINE</u>
15 DAYS	INTERIM STATUS TERMINATES	NOV. 8, 1985
	CLOSURE PLAN SUBMITTED TO EPA REGIONAL OFFICE	NOV. 23, 1985
90 DAYS		
	REGIONAL OFFICE APPROVES, MODIFIES, OR DISAPPROVES CLOSURE PLAN	FEB. 23, 1986
30 DAYS		
	FACILITY SUBMITS REVISED PLAN, IF NECESSARY	MAR. 23, 1986
60 DAYS		
	REGIONAL OFFICE APPROVES OR MODIFIES CLOSURE PLAN	MAY 23, 1986
180 DAYS		
	CLOSURE COMPLETED IN ACCORDANCE WITH THE APPROVED PLAN	NOV. 23, 1986

EPA's CLOSURE TIMETABLE FOR  
FACILITIES LOSING INTERIM STATUS

EPA regulations specify target time frames for closure activities applicable to all treatment, storage, and disposal facilities. Specifically, the land disposal facilities that lost interim status in November 1985 should have final, approved closure plans by May 23, 1986; and with some exceptions, closure work should be nearing completion by November 23, 1986. States are doing a large portion of the closure work. States that have been authorized by EPA to carry out the RCRA program are performing all closure plan reviews and approvals, and states that do not have authorization may do the technical reviews of the closure plans under EPA grants.

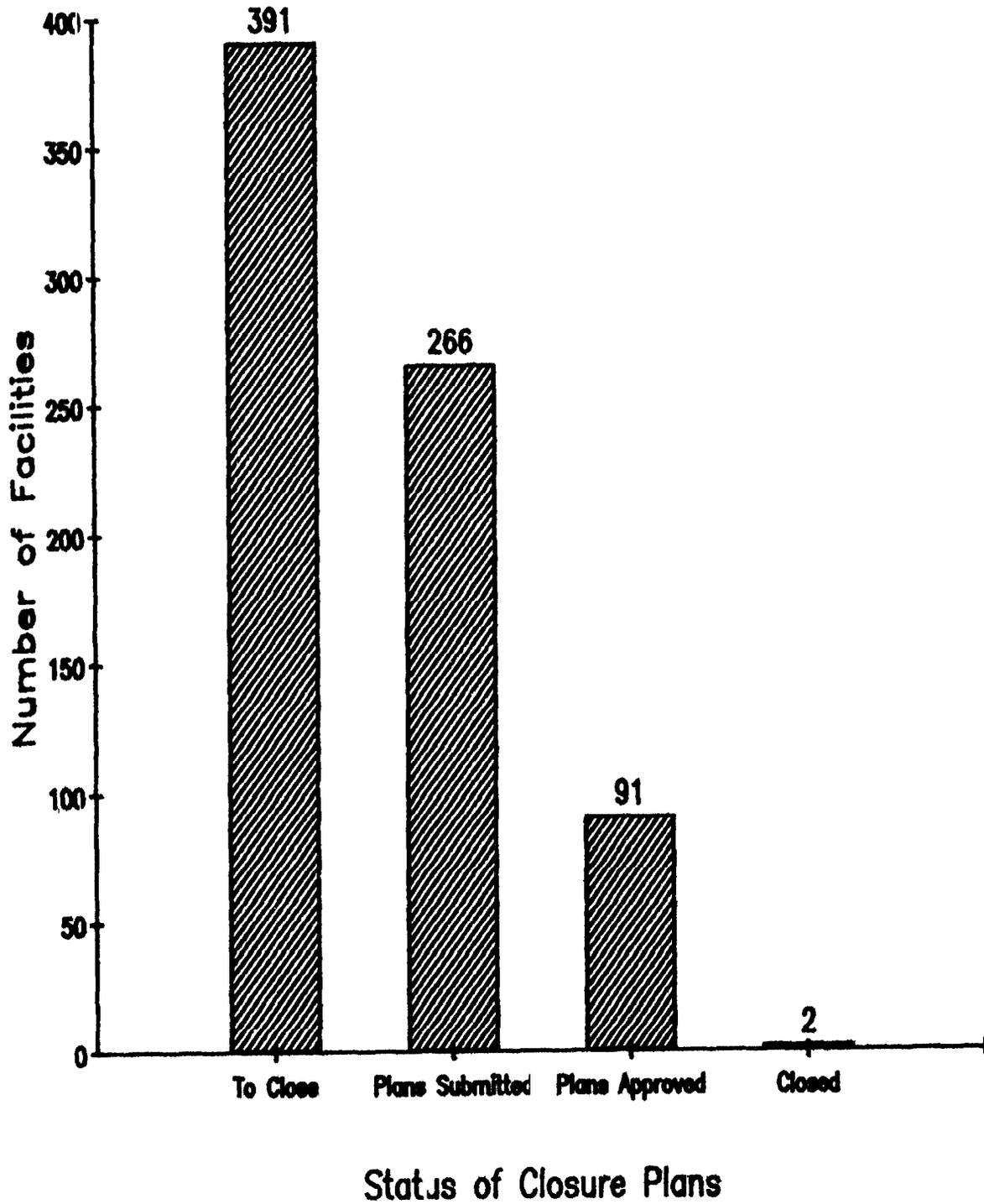
Figure 5.1  
National Closure Statistics  
for Land Disposal Facilities  
as of September 30, 1986



NATIONAL CLOSURE  
STATISTICS

Figure 5.1, which is based on EPA headquarters data, shows the progress EPA has made on a nationwide basis in closing the RCRA facilities that lost interim status on November 8, 1985. This information is current through September 1986 and illustrates, in conjunction with table 5.1, that EPA is far behind its regulatory time frame, which calls for approving all closure plans by May 1986 and completing closure by November 1986. EPA headquarters does not track the number of closures completed, but officials knew of no closures that were completed between November 8, 1985, and September 1986.

Figure 5.2  
EPA Regions I, V, and VI  
Closure Statistics



## CLOSURE PROGRESS IN REGIONS I, V, AND VI

In the three regions we visited, we attempted to determine EPA's progress in meeting the regulatory closure timetable and the reasons for any delays. Regional office and state officials acknowledged that EPA's closure progress is behind its regulatory timetable. However, we could not precisely quantify closure progress in the three regions because of weaknesses in the regions' closure information. Figure 5.2 and the following statistics are based on the most accurate and up-to-date closure data the regions could provide at the time of our review.

The three regional data bases showed that a total of 458 land disposal facilities did not certify compliance by November 8, 1985. However, 67 of these facilities had already been closed prior to the certification date. Of the remaining 391 facilities, 266 facilities submitted their closure plans on time, 91 had their plans approved by the May 23, 1986, deadline, and 2 of the facilities have completed the closure process. Almost 62 percent of the facilities that did not submit closure plans on time were located in region V. As of November 1986, region V had taken enforcement action against 43 facilities for not submitting closure plans. Region V plans to have authorized states take enforcement actions for the balance of facilities, when possible, but the region will take action in Michigan and Ohio, which do not have the authority from EPA to take enforcement actions themselves. Region V hopes to make significant progress in issuing these enforcement actions by January 1987.

Although a total of 125 closure plans were not submitted on time, the biggest logjam has been EPA and state delays in approval of the closure plans. As of May 1986, the target time frame for approving all plans, only 91 plans had been approved. The majority of these approvals were on plans submitted before November 23, 1985, during fiscal years 1984 and 1985. One regional official said that EPA and the states cannot approve some of the plans, even though they were submitted on time, because the plans are incomplete. However, according to the EPA and state officials, the primary problem seems to be limited resources to process the large number of closures. EPA is giving preference to higher priority activities such as meeting the statutory deadline of November 1988 for issuing land disposal permits and initiating corrective action studies.

## PROJECTIONS FOR COMPLETING CLOSURE

EPA headquarters estimated that most closure plans will be approved by fiscal year 1990, and that completing the closure process will take at least another year after the plans are approved.

Region I was unable to provide an estimate for closure plan approval or completion of the closure process because it had not done an analysis of the closure work load and the resources available to handle the work load. Region I's RCRA program coordinator stated that the region cannot accurately predict the resources that will be available over a period of years for reviewing closure plans. In allocating resources for RCRA activities, the region must consider headquarters' priorities, which change annually (closure was not a fiscal year 1986 priority), address significant facilities, and try to operate a balanced program. Connecticut, which has about 67 percent of the region's closing land disposals, agreed that it is difficult to predict when all closure plans will be approved, but stated that the approval process will probably continue until at least September 1990. The state believed that closure could be completed within the 6 months EPA allows after closure plan approval, which means that closures should be completed in about 1991.

Region V believed it could approve all land disposal closure plans by fiscal year 1991, according to an August 1986 multi-year facility management strategy document. Most closures should be complete within 1 year after approval, which suggests that closures could be completed for most facilities by fiscal year 1992.

Region VI expects its states to complete closure plan approvals by June 1988 and in most cases, closure should be complete by June 1989. However, region VI said that some facilities may not complete closure by 1989. For example, one facility plans to remove the waste from its land disposal unit and incinerate it onsite. However, it first must obtain a permit to build the incinerator.

## OBSERVATIONS

EPA is far behind its regulatory timetable for closing facilities that did not certify compliance with groundwater monitoring and financial responsibility requirements. Through September 1986, EPA and the states have approved less than 20 percent of the closure plans for the 995 land disposal facilities nationwide that lost interim status. EPA headquarters officials were not aware of any facilities having completed the closure process since November 8, 1985. EPA headquarters estimated that it will take until at least fiscal year 1990 to approve all closure plans for land disposal facilities. In addition, EPA estimated that it will be at least 1 year after closure plan approval before facilities complete the closure process.

EPA headquarters and regional officials provided two reasons for the delay in processing closures. First, EPA's highest priority is to issue permits to facilities that will continue to operate by the congressionally mandated deadline of November 1988. Another initiative that has a higher priority than approving closure plans is conducting studies at all land disposal facilities to determine whether cleanup of existing contamination (corrective action) is necessary at these facilities. Since these activities often involve the use of the same resources, EPA and the states have been unable to process the large number of facility closures in a timely manner.

Closure is intended to minimize the potential for the migration of hazardous wastes from the disposal unit into the environment. It is important to note, however, that the closure process does not (1) mean that a facility cannot cause future environmental harm, (2) necessarily include cleanup of all hazardous waste releases (corrective action), or (3) relieve the owner/operator of responsibility for future cleanup or corrective action. Under corrective action, EPA, the states, or the owner/operator must determine whether there is a release at a facility, characterize the nature and extent of the release, develop alternatives for cleanup, and implement the cleanup plan. EPA does not expect to complete the preliminary studies necessary to determine whether corrective action is needed at closing facilities until fiscal year 1990. Priorities for implementing more detailed studies or interim corrective measures at individual facilities will be based on these studies.

It was not within the scope of our review to take issue with how EPA and the states establish RCRA program priorities--nor did we review the basis for EPA's projections that it will take until 1990 to close facilities that ceased operations as a result of the certification amendments. While the facilities are awaiting closure, they represent a potential environmental hazard and will require monitoring by EPA or the states to ensure they are complying with applicable regulations. However, the

environmental threats they may pose, and any corrective actions that may be needed to reduce their potential for environmental harm, will remain unclear for a number of years. Because EPA plans to monitor such facilities, we are not making any recommendations at this time.

GAO SAMPLING METHODOLOGY

The following is a description of the sampling methodology we used in each of the three regions.

REGION I

False certifiers--We completed data collection instruments on all of the suspected false certifiers targeted by EPA headquarters or the region (15). We added one facility to the review (for a total of 16 facilities) because we determined through reviewing congressional documents that the facility could be in significant violation of groundwater monitoring requirements.

Illegal operators--We completed data collection instruments on all of the suspected illegal operators targeted by EPA headquarters or the region (22). We added 23 facilities (for a total of 45 facilities) that, according to EPA region I data, did not submit a closure plan on time.

REGION V

False certifiers--We completed data collection instruments on 30 of the 67 facilities targeted by EPA headquarters or the region for suspected false certification. We added two facilities to the review (for a total of 32 facilities) because we determined through the review of congressional documents, that these facilities could be in significant violation of groundwater monitoring requirements.

Illegal operators--We completed data collection instruments on 18 of the 119 facilities targeted by EPA headquarters or the region as suspected illegal operators. We added 8 facilities (for a total of 26 facilities) that, according to EPA data, may not have submitted a closure plan on time. Because of time constraints, we were limited to completing 26 instruments, and for those targeted by EPA, we concentrated on identified illegal operators with an enforcement action in process as of July 1986.

REGION VI

False certifiers--We completed data collection instruments on 54 of the 99 facilities targeted by EPA headquarters or the region for suspected false certification. We added 14 facilities to the review (for a total of 68 facilities) because we determined through the review of congressional

documents that these facilities could be in significant violation of groundwater monitoring requirements.

Illegal operators--We completed data collection instruments on all of the illegal operators targeted by EPA headquarters or the region (30). We added 32 facilities to the review (for a total of 62 facilities) that, according to EPA headquarters' data, may not have submitted a closure plan.

Table II.1Inspections at Certifying Facilities

<u>Region</u>	<u>Number of facilities retaining interim status</u>	<u>Number of inspections</u>
I	20	20
II	32	32
III	49	49
IV	86	86
V	115	108
VI	156	156
VII	15	15
VIII	25	25
IX	31	31
X	<u>14</u>	<u>14</u>
Total	<u>543</u>	<u>536</u>

Source: EPA headquarters' report dated 11/7/86 on loss of interim status activities.

Table III.1Inspections at Noncertifying Facilities

<u>Region</u>	<u>Number of facilities losing interim status</u>	<u>Number of inspections</u>
I	117	117
II	65	61
III	78	78
IV	164	164
V	215	191
VI	140	140
VII	75	62
VIII	36	36
IX	77	77
X	<u>28</u>	<u>18</u>
Total	<u>995</u>	<u>944</u>

Source: EPA headquarters' report dated 11/7/86 on loss of interim status activities.

Table IV.1Enforcement Actions Against Invalid  
CertifiersTypes of enforcement actions<sup>a</sup>

<u>Region</u>	<u>Number of invalid certifiers</u>	<u>Admin. orders</u>		<u>Civil actions</u>		
		<u>In prep.</u>	<u>Issued</u>	<u>In prep.</u>	<u>Referred to HQ</u>	<u>Filed</u>
I	2	0	1	1	0	0
II	1	0	1	0	0	0
III	0	0	0	0	0	0
IV	2	0	0	1	1	0
V	3	0	1	0	2	0
VI	14	9	3	0	1	1
VII	0	0	0	0	0	0
VIII	0	0	0	0	0	0
IX	0	0	0	0	0	0
X	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>22</u>	<u>9</u>	<u>6</u>	<u>2</u>	<u>4</u>	<u>1</u>

<sup>a</sup>In addition, one case in region V has been referred to headquarters and is being pursued as a criminal action for false certification.

Source: EPA headquarters' report dated 11/7/86 on loss of interim status activities.

Table V.1Enforcement Actions Against Illegal Operators

<u>Region</u>	<u>Number of illegal operators</u>	<u>Types of enforcement actions<sup>a</sup></u>					
		<u>Admin. orders</u>		<u>Civil actions</u>			
		<u>In prep.</u>	<u>Issued</u>	<u>In prep.</u>	<u>Referred to HQ</u>	<u>Filed</u>	
I	4	0	1	0	0	3	
II	3	0	0	0	2	0	
III	5	0	2	0	3	0	
IV	20	0	8	7	5	0	
V	24	0	0	1	15	8	
VI	4	1	1	2	0	0	
VII	0	0	0	0	0	0	
VIII	0	0	0	0	0	0	
IX	2	0	0	0	0	2	
X	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total	<u>62<sup>b</sup></u>	<u>1</u>	<u>12</u>	<u>10</u>	<u>25</u>	<u>13</u>	

<sup>a</sup>There are no criminal actions underway.

<sup>b</sup>EPA has not taken an enforcement action against 1 of the 3 facilities in region II. The facility operated for 4 days after November 8, 1985. However, it ceased operating when it was inspected by EPA on November 12 and submitted a closure plan by the end of December 1985. The state has issued a consent order denying the facility's operating permit and is reviewing the facility's closure plan.

Source: EPA headquarters' report dated 11/7/86 on loss of interim status activities.

Table VI.1  
Facilities with Accepted Certifications  
That had a CME<sup>a</sup>

<u>Region</u>	<u>Facilities with accepted certifications</u>	<u>CMEs</u>
I	13	11 <sup>b</sup>
V	27	20 <sup>c</sup>
VI	<u>12</u>	<u>11</u>
	<u>52</u>	<u>42</u>

<sup>a</sup>Comprehensive monitoring evaluation.

<sup>b</sup>The two remaining facilities had groundwater monitoring waivers in accordance with EPA regulations.

<sup>c</sup>This figure includes three facilities for which we could not determine that CME's were done.

Source: EPA files.

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