



OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

Continued EPA Leadership Will Support State Needs for Information and Guidance on RCRA Financial Assurance

Report No. 2005-P-00026

September 26, 2005



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Abbreviations

| | |
|---------|---|
| ASTSWMO | Association of State and Territorial Solid Waste Management Officials |
| EFAB | Environmental Financial Advisory Board |
| EPA | U.S. Environmental Protection Agency |
| OIG | Office of Inspector General |
| RCRA | Resource Conservation and Recovery Act |
| TSDf | Treatment, Storage, and Disposal Facility |

Cover photo: A Class I Landfill in post-closure
(Courtesy California Department of Toxic Substances Control)



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

This report addresses efforts of the Environmental Protection Agency (EPA) to implement financial assurance requirements at hazardous waste facilities regulated under the Resource Conservation and Recovery Act (RCRA). Regulators have expressed concern that some of the methods used to ensure that facilities have sufficient funds to cover facility closure costs are limited, may not be effective, and may financially impact EPA and States.

Background

RCRA hazardous waste facilities are required to provide assurance that they have sufficient financial assets to cover closure costs for all permitted and interim status units as well as post-closure costs for all land-based units. EPA has authorized all but two of the States (Iowa and Alaska) to implement these requirements.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link:

www.epa.gov/oig/reports/2005/20050926-2005-P-00026.pdf

Continued EPA Leadership Will Support State Needs for Information and Guidance on RCRA Financial Assurance

What We Found

EPA does not have adequate data on financial assurance at hazardous waste treatment, storage, and disposal facilities regulated under RCRA. Unlike many other types of permit information, basic financial assurance information has not been reported into EPA's national database. This hampers efforts to evaluate the effectiveness of current financial assurance mechanisms and make adjustments to ensure facilities have sufficient funds for closure and post-closure costs.

State and EPA financial assurance officials need to improve communication mechanisms to share financial assurance information. EPA also needs to update guidance, particularly for insurance, and needs to uniformly oversee State programs. Such actions will improve the ability of States to make informed decisions on the adequacy of financial assurance mechanisms. Further, States and EPA staff have expressed concern with aspects of the financial test and other financial assurance mechanisms. Although States and regions expressed concerns about financial assurance, we noted few examples in which failures occurred.

EPA is taking positive steps to address various issues. The Office of Enforcement and Compliance Assurance formally identified financial assurance as a program priority. EPA is incorporating some necessary financial assurance data elements into its information system, and recently implemented a successful financial assurance training program for States. EPA has asked its Environmental Financial Advisory Board to study and make recommendations on financial assurance issues of concern. Our work supports EPA's efforts and identifies additional improvement opportunities.

What We Recommend

We recommend that EPA implement financial assurance data elements after ensuring the information needs will be satisfied by these elements; actively engage States and regions in developing communication mechanisms and guidance; continue support of financial assurance training; develop mechanisms to ensure adequate EPA regional oversight of State programs; and clarify goals, milestones, and timelines for addressing financial assurance modifications. EPA generally agreed with our recommendations, and made suggestions that we incorporated into the report. The Agency's full response to the recommendations is in Appendix A.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
INSPECTOR GENERAL

September 26, 2005

MEMORANDUM

SUBJECT: Continued EPA Leadership Will Support State Needs for Information and
Guidance on RCRA Financial Assurance
Report No. 2005-P-00026

FROM: Carolyn Copper /s/
Director for Program Evaluation
Hazardous Waste Issues

TO: Thomas P. Dunne
Deputy Assistant Administrator
Office of Solid Waste and Emergency Response

This is the final report on our evaluation of the effectiveness of EPA's hazardous waste financial assurance requirements conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This report contains findings that describe the problems the OIG identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and the findings in this report do not necessarily represent the final EPA position. Final determination on matters in the report will be made by EPA managers in accordance with established resolution procedures. The report includes EPA's full response to the recommendations in Appendix A; we did not include the attachment providing specific comments.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 days of the date of this report. You should include a corrective actions plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public.

If you or you staff have questions, I can be reached at (202) 566-0829, and Steve Hanna, Assignment Manager, can be reached at (415) 947-4527.

Table of Contents

At a Glance

Chapters

| | | |
|----------|---|-----------|
| 1 | Introduction | 1 |
| | Purpose | 1 |
| | Background | 1 |
| | Scope and Methodology | 4 |
| 2 | Limited Financial Assurance Data Impacts Program Management | 5 |
| | EPA and States Have Limited Data on Financial Assurance | 5 |
| | EPA's Planned Actions May Address Some Data Limitations | 7 |
| | Conclusions | 8 |
| | Recommendation | 8 |
| | Agency Comment and OIG Evaluation | 8 |
| 3 | Improved Communication, Guidance, and Oversight Needed | 9 |
| | Better Communication Mechanisms Needed | 9 |
| | Formal Guidance Remains a Concern | 10 |
| | EPA Oversight of State Programs Has Missed Problems | 11 |
| | Recent Training Successful, but Increased Support for States Needed | 11 |
| | Conclusions | 12 |
| | Recommendations | 12 |
| | Agency Comment and OIG Evaluation | 12 |
| 4 | Several Indicators Show Need for Financial Assurance Modifications | 13 |
| | EPA Has Plans and is Acting to Address Issues | 13 |
| | States Have Taken Actions to Implement Additional Restrictions | 14 |
| | States Expressed Concerns with Financial Test and Other Mechanisms | 15 |
| | Industry Representatives Believe Mechanisms Adequate | 17 |
| | Conclusions | 17 |
| | Recommendation | 17 |
| | Agency Comment and OIG Evaluation | 17 |

Appendices

| | | |
|----------|--|-----------|
| A | Agency Response to Draft Report | 18 |
| B | Distribution | 21 |

Chapter 1

Introduction

Purpose

This report focuses on efforts of the Environmental Protection Agency (EPA) to address financial assurance concerns associated with hazardous waste treatment, storage, and disposal facilities regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA). Our specific questions were:

- What information exists on the effectiveness of the existing RCRA Subtitle C financial assurance requirements?
- What assistance is provided to States and regions by EPA's Office of Solid Waste to ensure adequate review of financial assurance requirements?
- Should existing financial assurance requirements be modified?

Background

EPA implemented financial assurance regulations under RCRA to ensure that facilities will have sufficient funds to properly close their permitted and interim status units and maintain the site for the duration of post-closure responsibility. EPA implemented these regulations to prevent default to Federal funds in the event that RCRA facilities are unable or unwilling to cover closure and post-closure costs. Financial assurance is required for major regulated entities in all three of the RCRA programs:

- **RCRA Subtitle C:** Hazardous waste treatment, storage, and disposal facilities (TSDFs). Interim status TSDFs, which are allowed to continue operating if their activities predated a new RCRA statute or regulation, are also required to have financial assurance mechanisms.
- **RCRA Subtitle D:** Municipal solid waste facilities.
- **RCRA Subtitle I:** Underground storage tanks.

EPA has authorized all but two of the States (Iowa and Alaska) to implement the base RCRA Subtitle C program. TSDFs are required to demonstrate financial assurance for closure costs, post-closure costs, and third-party liability insurance coverage for sudden and non-sudden accidental contamination. Financial assurance requirements do not apply to hazardous waste generators and State or Federally owned and operated facilities.

Closure and post-closure costs are components of the formal RCRA permit. Estimates must be updated annually to account for facility expansion as well as inflation. Software has been developed by EPA to estimate closure and post-closure costs.

The allowable RCRA Subtitle C financial assurance mechanisms are listed in Table 1.1.

| Table 1.1 - Financial Assurance Closure and Post-Closure Mechanisms | |
|--|--|
| Financial test | A test that evaluates the assets and liabilities of a company to determine whether it will have resources available to cover closure/post-closure costs. |
| Corporate guarantee | The guarantee of closure/post-closure costs by an affiliated corporation, such as a parent company, another firm under the same parent company, or a firm with a substantial business relationship with the RCRA facility. |
| Trust fund | Money set aside in a trust, specifically allocated for closure and post-closure expenditures. |
| Letter of credit | Credit issued by a financial institution that guarantees payment of the RCRA facility's obligations up to a specified amount. |
| Surety bond | Guarantees issued by a surety company that specified obligations will be met. The bonds are either in the form of payment (payment bonds) or commitment to comply with closure, post-closure, and liability requirements (performance bonds). |
| Insurance | An insurance policy for the value of closure/post-closure costs. The policy must guarantee that funds up to the face amount of the policy will be available for payment of closure or post-closure care upon the direction of the permitting authority. |
| Combinations | Trust funds, letters of credit, surety bonds guaranteeing payment, and insurance can be combined for a facility if together their value is at least equal to the closure or post-closure cost estimate. Surety bonds guaranteeing performance, financial tests, and corporate guarantees cannot be combined. |

Financial Assurance Concerns

The States and regions we interviewed expressed consistent concerns with aspects of financial assurance. They believed these concerns would be best addressed at the national level by EPA, including a rulemaking process that would revise the existing financial assurance regulations. Their concerns included:

- Lack of national data on companies and financial assurance providers.
- Lack of an effective mechanism for communicating financial assurance concerns to appropriate State and regional staff in a timely manner.
- Insufficient guidance, especially on insurance.
- Allowance of captive insurance as a mechanism.
- Conflicts between the current financial test and generally-accepted accounting principles.
- Lack of regulations on corrective action financial assurance.

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) articulated these State concerns, and in 2003 formed an internal group to address State problems with financial assurance methods. Their draft paper, completed in 2004, was originally distributed at a meeting of EPA's Environmental Financial Advisory Board, a Federally chartered advisory group that provides advice to EPA. The paper identifies the following issues:

- **Financial Test/Corporate Guarantee:** Various States are of the opinion that EPA should reconsider the financial test and corporate guarantee as financial assurance mechanisms, in light of recent financial failures of several large corporations.
- **Insurance:** States cited numerous problems, including the difficulty of getting claims paid and lack of State awareness of the true coverage provided by the policy. The lack of standardized language for policies was a major complaint. The lack of independence associated with "captive" insurance and "fronting" arrangements were also of concern.¹
- **Corrective action:** Many States want EPA to finalize corrective action financial assurance; cost estimation guidance is needed.

The ASTSWMO paper recommends the following improvements:

1. Ensure adequate cost estimates for closure and post-closure are complete prior to permit issuance.
2. Provide financial assurance in corrective action prior to remedy selection.
3. Incorporate financial assurance information into the RCRAInfo database.
4. Investigate complex insurance issues and review State needs for additional guidance.
5. Update the Financial Assurance guidance.

Prior Evaluation

In March 2001, EPA OIG published a report entitled "RCRA Financial Assurance for Closure and Post-Closure." EPA requested the evaluation to determine whether RCRA financial assurance requirements and the implementation of those requirements provided adequate funding for facility closure and post-closure activities. This evaluation included both RCRA Subtitle C and D facilities, and included a detailed analysis of financial assurance data from multiple States. The report recommendations and their implementation status are shown in Table 1.2.

¹ "Pure Captive" insurance is insurance issued by a wholly-owned subsidiary of the company being insured. Regarding "fronting" arrangements, if an insurance company wants to issue a policy outside the State in which it has been licensed, it can arrange for a State-licensed insurer to write the policy on its letterhead; the actual policy is underwritten by the first company but "fronted" by the carrier that can do business within the State.

| Table 1.2 - 2001 EPA OIG Report Recommendations and Status | | |
|--|-----------------|---------------|
| Recommendation | Agency Response | Action Taken? |
| Develop specific financial assurance guidance for insurance. | Agree | No |
| Improve existing financial assurance training material. | Agree | Yes |
| Post financial assurance information on internal bulletin boards. | Agree | No |
| Develop criteria to establish appropriate post-closure care time frames. | Agree | No |
| Provide cost estimation software to States. | Agree | Yes |

Scope and Methodology

We conducted our program evaluation field work from July 2004 through March 2005 in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States. We reviewed management controls related to EPA oversight of State financial assurance mechanisms. The lack of Federal financial assurance data prevented a substantive review of these controls and of data quality. Identification of problem facilities was provided by interviewees, and details on the nature and scope of the problems were obtained from the State or region with primary regulatory responsibility at each facility. We evaluated data from four State databases by compiling and summarizing data supplied by those States.

To achieve our objectives, we interviewed EPA staff from the Office of Solid Waste within the Office of Solid Waste and Emergency Response, and staff from the Office of Enforcement and Compliance Assurance. We also interviewed staff in EPA Regions 4, 6, 8, 9, and 10, to obtain a regional perspective on the issues.

For external stakeholders, we interviewed officials in six States – California, Colorado, Connecticut, New York, Texas, and Washington. States were selected to include programs with expertise in financial assurance. We also interviewed staff at ASTSWMO, an organization of State environmental officials. Further, we interviewed industry representatives from the American Chemistry Council, Environmental Technology Council, and Waste Management Incorporated, based on their known interest or involvement in financial assurance.

To answer our evaluation questions, we asked regions and States a series of structured questions specific to regulatory issues and EPA’s management of the financial assurance program. We questioned other stakeholders about financial assurance in general, including their opinions on financial assurance mechanisms. We reviewed numerous documents, Web sites, and publications. We obtained State program information from State and regional financial assurance staff.

Chapter 2

Limited Financial Assurance Data Impacts Program Management

EPA does not have adequate data at the State or national level to determine the effectiveness of EPA efforts regarding financial assurance for TSDFs regulated by RCRA Subtitle C. Unlike many other types of permit information, basic financial assurance information has not been reported into EPA's national database (RCRAInfo). This hampers efforts to evaluate the effectiveness of current financial assurance mechanisms and make adjustments where needed to ensure facilities have sufficient funds for closure and post-closure costs. EPA is addressing this issue by identifying appropriate financial assurance data elements for incorporation into its national database. Although States and regions expressed concerns about financial assurance, we noted few examples in which failures occurred.

EPA and States Have Limited Data on Financial Assurance

Financial Assurance Information Not Routinely Collected

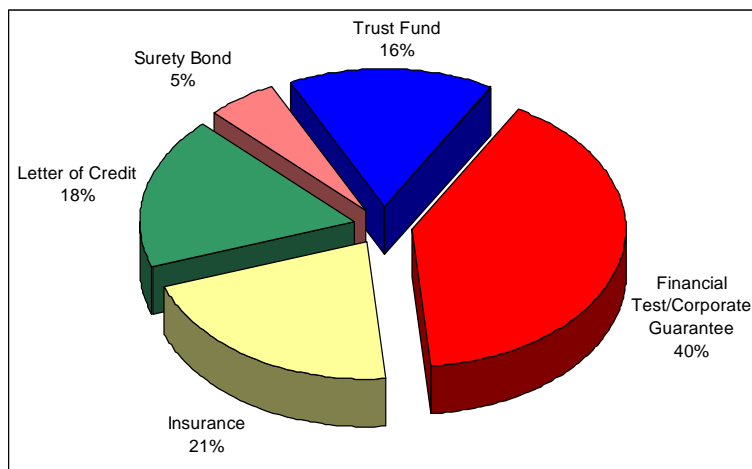
Our efforts to determine the nature and scope of financial assurance problems have been hampered by the lack of essential data in RCRAInfo, the Office of Solid Waste's primary information system. Although financial assurance mechanisms have been required for over 20 years, no history exists on mechanisms used, company or corporate problems, financial assurance provider problems, or cost estimate accuracy. According to RCRA regulations, closure and post-closure estimates are required to be submitted in the biennial hazardous waste report. This report is required of all TSDFs, but EPA apparently never included the financial assurance information in its biennial report forms.

Some States developed financial assurance databases to support their programs. However, these databases do not contain the same information in the same formats, and are not in use in all States. This prevents the development of a national perspective on financial assurance based on the data in these systems. Additionally, States may include non-RCRA facilities in their data systems, which can further complicate the use of State data.

We obtained information available from four State systems, covering over 470 facilities, which may include some non-RCRA TSDFs. Analysis of information from these State databases indicates that all types of financial assurance mechanisms are used (see Figure 2.1). The financial test and corporate guarantee, which rely on a company's financial strength to pay for closure and post-closure, occur with the highest frequency (40 percent of the facilities).

Figure 2.1 - State Financial Assurance Mechanisms

(Source: OIG analysis of data from CA, CT, TX, and WA)



Some Information on Problem Facilities Indicates Problems Not Due to Failure of Financial Assurance Mechanisms or Oversight

Due to a lack of comprehensive data on the effectiveness of the RCRA financial assurance program, we asked all interviewees to identify RCRA facilities with potential financial assurance “problems” to determine whether case studies could provide additional insight into any problems or failures. The interviewees identified 21 facilities, including TSDFs as well as facilities never formally regulated as TSDFs, such as generators and recyclers.

Analysis of the problem facilities indicated that financial assurance for closure and post-closure of permitted and interim status units generally were not the primary issues of concern. Instead, these facilities appeared to have significant remediation costs beyond financial assurance coverage for closure and post-closure. Of the 21 problem facilities, only 3 had financial assurance as the primary problem. Nine had no unresolved financial assurance problems, and the other nine had significant remediation costs not covered by financial assurance for closure and post-closure. The facilities subject to remediation included generators and recyclers as well as TSDFs. Specific issues for the three facilities with financial assurance problems were:

- **Bankruptcies:** All three facilities were abandoned, insolvent, or filed for bankruptcy.
- **Cost estimation:** Two facilities had underestimated closure and/or post-closure costs.
- **Insurance transition:** One facility presented a problem in continuing the use of insurance upon the prospective sale of the facility.

Two other companies out of the 21, found to have no financial assurance issues, still illustrate one State’s concern with existing Federal financial assurance requirements. The two companies financially assured their facilities with the

financial test but later entered or nearly entered into bankruptcy. The affected State regulatory agency successfully obtained alternative instruments from the companies. Although the companies fiscally recovered, the State is still concerned that it will not have the flexibility to deny the financial test because Federal regulations do not provide any justification for such a denial despite the companies' past financial failures.

EPA's Planned Actions May Address Some Data Limitations

EPA has proposed additional financial assurance data elements for RCRAInfo in two areas – “coverage” and “financial assurance instrument” – and these proposed elements have been accepted by States and EPA. Coverage data elements include the type of financial assurance required (closure, post-closure, corrective action, or liability), start/end dates of financial assurance requirements, cost estimates, and environmental obligations of the owner/operator. Financial assurance data elements include the mechanism type, identifier, start/renewal dates, provider, and face value. The majority of these data elements are mandatory.

These planned actions represent significant progress in developing financial assurance data at a national level. States and regions interviewed agreed the proposed data elements were adequate and should be mandatory. One additional step EPA needs to take is to clearly define the desired financial assurance outputs from RCRAInfo *prior* to defining the data elements. This is a critical first step in systems analysis, and provides assurance that the information collected will support programmatic needs. Examples of additional factors that need to be considered prior to designing the system are:

- **Tickler reports** - “Tickler” reports are typically used to provide information on pending events or milestones. An example of a tickler report for financial assurance would be a list of facilities whose mechanisms are scheduled to expire or whose annual inflation update is due in the next month. If tickler reports are required, they must be programmed and appropriate data must be defined to generate the reports.
- **Financial Assurance Provider links** - If a provider experiences financial problems, links to all facilities and States using the provider would help inform the regulators. Providers must be capable of being linked by a unique identifier other than name, to provide accurate computer matching.
- **Company links** - If the system is to identify facilities within the same company, a parent company identifier (such as a Dun and Bradstreet number) is needed, since names typically do not provide accurate computer matching.
- **Historical trends** - Stakeholders believe trend shifts in the financial assurance mechanism market can anticipate potential market-wide mechanism failures. If historical analysis is used, the system must be designed to store all prior entries instead of just replacing the data and storing only the current entry.
- **Cost Estimate Accuracy** - One concern consistently expressed by States and regions was the accuracy of the projected versus actual closure and post-

closure costs. Actual cost data are not usually available, as the TSDf is not required to report the costs. However, this information sometimes is available and should be considered as data elements when that is the case.

- **Annual Reports** - To provide effective regional oversight and ensure entry of mandatory data elements, annual reports should be defined to identify apparent discrepancies in program activity or data entry. Examples would be reports on facilities with expired mechanisms or overdue annual updates. These reports should be defined prior to system modifications to ensure the necessary data elements are collected and the report capability developed.
- **Financial test data verification** - Companies using the financial test are required to include a list of all TSDfS covered by the test, irrespective of their State location, to allow verification that sufficient company resources exist to cover the requirements for all facilities. However, at least one State has discovered that the same list of TSDfS may not be reported to the appropriate States, and cross-State comparisons could prevent this inconsistency.

Conclusions

Despite ongoing concerns from States and regions about financial assurance issues, the problems cannot be readily defined because of the lack of uniform national data. Consequently, EPA lacks complete information to manage financial assurance issues and activities at the national level. EPA's proposed financial assurance data elements will help address the fundamental requirements of a national system and, with improvements, add value to managing this information. Prior definition of the information products needed from the new system will help ensure that the modifications provide the tools necessary to manage financial assurance activities and policies, and monitor performance.

Recommendation

To ensure that data are collected to provide tools and information necessary to manage and monitor financial assurance activities, we recommend that the Deputy Assistant Administrator for Solid Waste and Emergency Response:

- 2.1 Incorporate the planned modifications to RCRAInfo to improve financial assurance data collected at the national level, and require a clear definition of outputs and features of the system prior to final definition of the required data elements. This could include such additional planned actions as tickler reports and improved financial assurance provider links.

Agency Comment and OIG Evaluation

EPA agreed with our recommendation, and indicated that financial assurance data elements will be incorporated into the next upgrade of RCRAInfo. We consider EPA's actions to be appropriate. The Agency's full response to the recommendation is in Appendix A.

Chapter 3

Improved Communication, Guidance, and Oversight Needed

State and EPA financial assurance staff currently do not have adequate communications mechanisms in place to share financial assurance information. EPA has not provided States updated guidance, especially on insurance, despite requests and recommendations for such guidance. EPA regions do not uniformly oversee State programs, as indicated by State allowance of inappropriate or questionable mechanisms. The inadequate communication, guidance, and oversight may affect the ability of States to make informed decisions on the adequacy of financial assurance mechanisms, and contribute to the State acceptance of inadequate or inappropriate mechanisms. Recent EPA-sponsored training for States and regions on financial assurance should help support some States' needs for technical information and guidance.

Better Communication Mechanisms Needed

State financial assurance concerns extend beyond each State's boundaries. For example, the failure of a single company that provides financial assurance to TSDFs in multiple States would impact programs in each of those States. Good communication between all States and regions would allow sharing and learning about financial assurance information, concerns, and pending problems. The 2001 OIG report had recommended the development of an electronic bulletin board to foster this level of communication, and we found that States and regions generally supported the implementation of a Web site for their use.

EPA has not developed a master list of State and regional financial assurance contacts, and therefore has no apparent ability to directly share information with these contacts. EPA indicated it typically communicates with State environmental executives, but this mechanism may not provide the most efficient notification to financial assurance staff on time-sensitive issues, such as pending financial assurance provider failures.

During the past year, EPA has held quarterly conference calls with the States to discuss financial assurance issues. These calls represent an important step in developing contacts and sharing information nationally. To date, 37 States have participated in these calls, indicating a high level of State interest. EPA's pending revisions to RCRAInfo should also indirectly contribute to enhancing cross-State and regional communications of key financial assurance facts.

Formal Guidance Remains a Concern

EPA issued formal guidance on financial assurance in 1982 to assist States and TSDFs in obtaining adequate closure and post-closure coverage. However, the guidance has not been formally updated since then, and States and regions are generally unaware of the existence of the 1982 EPA guidance. Updated guidance on financial assurance has been requested by States for years, and was recommended by the 2001 OIG report and the ASTSWMO report, as discussed previously. States are especially concerned about guidance in the area of insurance, which was also mentioned in both reports. Concerns about insurance include the following:

- **Standardized policy** - States and regions expressed concerns about complex insurance policy language and indicated a need for standardized, clear, and concise language. Problems may arise if regulators do not have the necessary expertise to adequately interpret a policy. However, development of standardized policy language is complicated by the existing regulation of policies on a State-by-State basis by State insurance commissions.
- **Certificate versus insurance policy** - TSDFs using insurance for financial assurance are required to submit a certificate of insurance; the detailed insurance policy is not required. However, the certificate by itself does not guarantee the policy meets financial assurance requirements. For example, one State reported it received a certificate that identified coverage for post-closure and corrective action, yet the policy was only written for post-closure.
- **Implementation problems** - The regulatory agency's ability to use funds may be limited by an insurance company's procedures and payment schedule, such as reimbursing the regulator for cleanup costs instead of providing direct access to the funds. States have also expressed concern that drawing on an insurance policy may require litigation, especially if the facility has been abandoned or the company is in bankruptcy.
- **Insurance cancellation** - The insurance company is required to notify the regulator prior to cancellation of the policy, but the company is not required to provide notification if it becomes insolvent or its license is suspended. States have reported cases in which a policy was canceled by the insurance company, leaving the TSDF without any financial assurance coverage and in violation of RCRA requirements. In these cases, prompt action by States is required, as the insurance company is obligated to provide 120 days notice prior to cancellation of the policy. The State must act to secure the funds within that time frame if the facility has been unable to find an alternative financial assurance mechanism, to guarantee the availability of funds to cover closure and/or post-closure costs.

The development of guidance documents does not need to be solely the responsibility of the Office of Solid Waste, although it should play a central role. Some States and regions have considerable expertise in financial assurance, and three EPA regions have staff positions dedicated to support of financial assurance.

Further, some States have developed checklists to assist staff in evaluating various financial assurance mechanisms.

EPA Oversight of State Programs Has Missed Problems

States have allowed the use of financial assurance mechanisms not explicitly allowed by Federal regulations. This suggests problems with EPA oversight and also supports the need for additional guidance. States also do not always follow prudent fiscal practices in the implementation of the mechanisms. Examples of unallowable mechanisms or imprudent fiscal practices include:

- Having State financial assurance regulations less stringent than RCRA.
- Allowing the use of certificates of deposit.
- Allowing the use of cash payments.
- Allowing the use of Treasury notes.
- Allowing the use of municipal bonds.
- Allowing trust funds to be funded with stock, including stock of the regulated company.
- Allowing trust funds to be funded with real estate.
- Allowing financial tests for a company with less than 90 percent of its total assets in the United States. Regulations require a company using the financial test to have at least 90 percent of its total assets in the United States.
- Not storing original letters of credit in fireproof safes.
- Not regularly updating cost estimates and mechanism values.

Recent Training Successful, but Increased Support for States Needed

EPA recently provided four week-long training sessions on RCRA Subtitle C Financial Assurance for States and regions. The training has been offered at varying locations at no cost, with participants responsible only for their travel costs. Cost estimation training has been given in four regions and is planned for the remaining regions. Both the need and success of the training are indicated by the high level of participation by States and regions. Representatives from all EPA regions and over half the States have attended one of the three training sessions provided.

State participation in training could be expanded if EPA provided travel funds for States in need. This could also be achieved by scheduling training in conjunction with conferences, such as ASTSWMO or EPA RCRA conferences, for which travel funds may already be available. Another option is to provide shortened courses targeted to specific States that have been unable to attend the longer course. In recent months, the Office of Civil Enforcement has provided mini-training courses on financial mechanisms in several States and regions.

Conclusions

States have expressed the need for better communication and guidance on RCRA financial assurance. Some States are implementing invalid financial assurance mechanisms, which supports the needs for better guidance and communication along with improved EPA oversight of State programs. Continued support for EPA's RCRA financial assurance training will help address some of the needs. However, training is a one-time event. To effectively manage financial assurance responsibilities over the long-term, EPA needs to establish better and consistent communications between and among States and regions and consistently provide current and relevant guidance.

Recommendations

We recommend that the Deputy Assistant Administrator for Solid Waste and Emergency Response:

- 3.1 Establish effective mechanisms of communication with State and regional financial assurance staff. This should include development and maintenance of master lists of financial assurance contacts, as well as implementation of an automated mechanism for information sharing and communication. State and regional expertise could be leveraged for this process, including the development of a communications working group with State and/or regional responsibility for specific areas.
- 3.2 With input and assistance from States and regions, define the guidance necessary for States to manage their programs. Guidance should include checklists and best practices for each mechanism. Guidance could be developed in a workgroup environment using State and regional resources, and could use products already developed and in use by some States.
- 3.3 EPA should develop mechanisms to ensure adequate oversight of State programs by EPA regions.
- 3.4 EPA should continue providing financial assurance training and explore mechanisms to facilitate State participation. This could include offering training in conjunction with conferences for which State travel costs may be covered, providing additional travel funds for States, and offering training to specific States.

Agency Comment and OIG Evaluation

EPA generally agreed with our recommendations. EPA indicated it will implement an information sharing mechanism available to both regions and States. EPA also indicated it will develop guidance, initiate oversight, and provide training. We consider EPA's actions to be appropriate. The Agency's full response to the recommendations is in Appendix A.

Chapter 4

Several Indicators Show Need for Financial Assurance Modifications

States have expressed concerns with aspects of the financial test and other financial assurance mechanisms. Some State laws allow States to implement financial assurance requirements more restrictive than EPA's by excluding certain mechanisms and modifying the requirements of others, while other States have chosen not to adopt more stringent standards. As EPA states in its June 2004 regulatory agenda, without a rulemaking (on the financial test), the improvement in the test would not be implemented in States that have chosen not to adopt standards more stringent than Federal standards. At EPA's request, the EPA Environmental Financial Advisory Board (EFAB) is reviewing several aspects of RCRA Subtitle C financial assurance and is developing recommendations.

EPA Has Plans and is Acting to Address Issues

In its June 2004 regulatory agenda, EPA planned a public notice in 2004 (notice of data availability) and a final rule in 2006 addressing RCRA Subtitle C financial test requirements. However, in 2004, the Office of Solid Waste placed its financial assurance rulemaking on hold as it posed several questions to the EFAB. Chartered in 1989 under the Federal Advisory Committee Act, the purpose of EFAB is to provide analysis and advice to EPA on financial issues. EFAB's membership includes prominent experts from the finance and banking community, industry, national organizations, and all levels of government. Issues EPA asked EFAB to address included:

- Improvements to the financial test and corporate guarantee.
- Guidance on insurance, including captive insurance.
- Methods to improve cost estimates.
- Applicability of financial assurance to entities not currently covered by RCRA financial assurance requirements.

In March 2005, EFAB drafted a letter proposing changes in the financial test. In the recommendations, EFAB defined criteria for an adequate test and then measured the adequacy of the existing financial test against those criteria. While the need for EFAB's review is supported by our own review, the lack of milestones for EFAB's completion and EPA's action on EFAB recommendations remains an obstacle to implementation of improvements.

The Office of Enforcement and Compliance Assurance recently identified financial assurance as a priority and demonstrated leadership on the issue. Recent

financial assurance activities of the Office of Enforcement and Compliance Assurance have included:

- Taking primary responsibility for the development and implementation of financial assurance training.
- Actively participating in development of new financial assurance data elements to be incorporated into RCRAInfo.
- Developing pilot State programs to analyze the effectiveness of States' existing financial assurance mechanisms.
- Formally identifying financial assurance as a priority in the *2006 National Program Managers' Guidance*.

The Office of Enforcement and Compliance Assurance is also currently performing an analysis of some financial test submittals. This analysis includes reviewing the submittals and, where appropriate, a review of data required under the Sarbanes-Oxley Act² or other publicly available information. The Office has found weaknesses in the evidence being used to support a company's eligibility criteria for the financial test. Some companies have junk bond status or received an adverse auditor's opinion citing material weaknesses regarding compliance with the Sarbanes-Oxley Act.

States Have Taken Actions to Implement Additional Restrictions

Twenty-six States have implemented additional provisions that are more restrictive than the RCRA regulations. These restrictions include:

- **Exclusion of captive insurance** - Thirteen States do not accept captive insurance as a financial assurance mechanism.
- **Reduced pay-in period for trust funds** - Fourteen States require a shorter period for fully-funding a trust than specified in the RCRA regulations, with some States requiring full funding up front.
- **Limitations on financial test and corporate guarantee** - Ten States have additional restrictions on the financial test and corporate guarantee.

States and regions support the revision of national financial assurance standards through a formal rulemaking process. This is especially true for those States whose statutes prevent them from being more stringent than RCRA and who must abide by current regulatory requirements. EPA clearly states in its June 2004 regulatory agenda that without a rulemaking (on the financial test), the improvement in the test would not be implemented in States that cannot have regulations more stringent than Federal standards.

² The Sarbanes-Oxley Act of 2002 includes provisions addressing audits, financial reporting and disclosure, conflicts of interest, and corporate governance at public companies.

States Expressed Concerns with Financial Test and Other Mechanisms

Financial Test Lacks Transparency and is Not Current with Standards

States and regions expressed specific concerns with documentation requirements for the RCRA Subtitle C financial test:

- **Letter from the chief financial officer** - Federal regulation requires a letter from the chief financial officer outlining the company's financial test performance. The chief financial officer letter must list all company facilities and their closure/post-closure cost estimates that are covered under the financial test. Because State regulators cannot easily verify the completeness of this list, especially for those corporations with facilities in multiple States and regions, regulators cannot preempt problems arising from incomplete chief financial officer letters that do not calculate all liabilities into the financial test.
- **Opinion of the certified public accountant** - The financial test requires a report stating the opinion of a certified public accountant on a company's audited financial statement's conformance with generally accepted accounting principles. RCRA Subtitle C financial assurance regulations can accept the financial test on a less stringent opinion than those that certify conformance with generally accepted accounting principles.
- **Special report of the certified public accountant** - The Subtitle C financial assurance regulations require an attestation of negative assurance from a certified public accountant that "no matters came to his attention which caused him to believe that the specified data should be adjusted." This is in conflict with existing accounting standards. For Subtitle C financial tests, EPA issued a guidance letter in response to the changes in the professional auditing standards suggesting alternatives and stating that, "The Agency intends to change the regulations so that they conform to the new professional auditing standards."

Captive Insurance Viewed as High Risk by States and Regions

Captive insurance is defined as insurance issued by a wholly-owned subsidiary of the company being insured. The financial health of the captive insurance company is closely tied with the parent company, so if the company encounters financial difficulties there is no guarantee that the captive insurance company would retain the necessary resources to fund closure and post-closure. This concern was expressed in our 2001 report and the ASTSWMO paper. Although we found no specific instances of financial assurance failure associated with captive insurance, States and regions remain concerned because there is no

independence of risk between the corporate parent and the company insured. Table 4.1, based upon our interviews and a recent report of the U.S. Government Accountability Office, shows the relative cost and risk for the various mechanisms from the perspective of the regulator. In this table, “risk” refers to the risk of funds for closure and post-closure being unavailable to the regulator; “cost” refers to the relative cost to the facility. States and regions interviewed consider captive insurance to be the highest risk, and almost universally oppose the concept.

| MECHANISM | RISK | COST |
|---------------------|-------------|-------------|
| Letter of Credit | Low | High |
| Trust Fund | Low | High |
| Insurance | Medium | Medium |
| Surety Bond | Medium Low | Medium High |
| Financial Test | High | Low |
| Corporate Guarantee | High | Low |
| Captive Insurance | Very High | Very Low |

Sources: OIG Analysis and GAO-05-658 Report “Environmental Liabilities: EPA Should Do More to Ensure That Liable Parties Meet Their Cleanup Obligations”

Development of Corrective Action Regulations Supported

Due to the lack of explicit corrective action regulations, EPA provided guidance in 2003 addressing financial assurance at corrective action facilities. In this guidance, EPA acknowledges a potential problem if financial assurance is not required until a remedy has been selected. With few exceptions, States and regions interviewed expressed the opinion that the financial assurance component of the corrective action should be addressed through development of explicit regulations, including the ability to require financial assurance prior to remedy selection.

Need for Financial Assurance Beyond 30 Years Unresolved

States and regions interviewed expressed concern with the potential need for post-closure financial assurance beyond the required 30 years for land-based units closed with waste in place. Although current regulations require post-closure financial assurance for land-based RCRA permitted units closed with waste in place for 30 years, regulators may extend the post-closure period at any time during or before the post-closure period, to protect human health and the environment. In our 2001 report, we found that most State agencies interviewed had not developed a policy or process to determine whether post-closure care should be extended. We had made a recommendation to develop criteria to establish appropriate post-closure care time frames, and while the Agency agreed with the recommendation it has not implemented it.

We believe this issue needs to be considered further. Some facilities are approaching the latter half of their 30-year post-closure period, and there is increased risk of a facility becoming insolvent with time. For example, a landfill in post-closure since 1989 followed the appropriate RCRA financial assurance

regulations and received an appropriate level of oversight by State regulatory staff. However, in 2004, the company notified the State that it could no longer care for the landfill, forcing State regulators to take emergency action and assume control of the landfill. This supports the need for EPA to develop plans for funding of post-closure beyond 30 years.

Industry Representatives Believe Mechanisms Adequate

Industry representatives generally considered the financial assurance mechanisms to be adequate, at least for large companies. Some industry representatives expressed the opinion that regulatory agencies should pay more attention to smaller companies, because the larger ones will more likely have resources to fund closure and post-closure.

Conclusions

States and regions have expressed concerns about the existing RCRA Subtitle C financial assurance regulations, especially in recent years. These concerns range from general issues with financial assurance mechanisms to specific requirements at odds with generally accepted accounting principles. Some States have implemented State-level financial assurance requirements more stringent than the Federal requirements. Other States cannot implement financial assurance requirements more stringent than Federal requirements, and therefore may only obtain relief from financial assurance problems through new Federal rules.

Recommendation

We recommend that the Deputy Assistant Administrator for Solid Waste and Emergency Response:

- 4.1 Develop and communicate EPA's plan for addressing concerns with the existing financial assurance regulations, including captive insurance, the financial test, expansion of financial assurance beyond TSDFs, corrective action, and post-closure coverage beyond 30 years. The plan should include milestones, decision points, and timelines for taking action, and indicate when and how EPA will determine if a rulemaking is necessary.

Agency Comment and OIG Evaluation

EPA agreed that a plan should be developed to address concerns with the existing financial assurance regulations. However, EPA believes this plan should be developed after completion of the Superfund 120 Day Study and after further progress by EFAB. We agree that a detailed plan should be developed after completion of the Superfund 120 Day Study and further progress by EFAB. However, EPA should develop and communicate an estimated timeframe for the completion of these tasks. The Agency's full response to the recommendation is in Appendix A.

Agency Response to Draft Report

August 30, 2005

MEMORANDUM

SUBJECT: Comments on Draft Evaluation Report:
Continued EPA Leadership Will Support State Needs for Information and Guidance
on RCRA Financial Assurance
Assignment No. 2004-001336

FROM: Thomas P. Dunne/s/
Acting Assistant Administrator

TO: Ms. Carolyn Cooper
Director for Program Evaluation
Hazardous Waste Issues
Office of Program Evaluation
Office of Inspector General

Thank you for the opportunity to comment on the draft report. Your office investigated an important aspect of our program on which we have focused as well. Your August 1, 2005 memo requested that I comment on the factual accuracy of the draft report and indicate concurrence with each finding and proposed recommendation.

I have attached our comments on the draft report as well as our response to your recommendations, with which we largely agree. Generally, however, we are pleased to learn that, while your office identified several concerns that need to be addressed, you found very few actual instances of financial assurance problems in the course of your interviews with State and regional personnel.

We are also pleased to see the OIG endorses the plan to include financial assurance information in RCRAInfo.

If your staff has any questions on the comments, please contact Dale Ruhter (703) 308-8192 in the Office of Solid Waste.

Attachments:

- I. EPA's Response to OIG Draft Recommendations
- II. Specific Comments (*not included in this report*)

Attachment I.
EPA's Response to OIG Draft Recommendations

Recommendation 2.1

Incorporate the planned modifications to RCRAInfo to improve financial assurance data collected at the national level, and require a clear definition of outputs and features of the system prior to final definition of the required data elements. This could include such additional planned actions as tickler reports and improved financial assurance provider links.

EPA Response:

We generally agree. The EPA-State Executive Steering Committee for the RCRA data system (RCRAInfo) has formally accepted the data changes identified by the EPA-State Permitting-Corrective Action workgroup, and these changes will be incorporated in the next upgrade to RCRAInfo. As EPA develops the program design changes necessary to track the new data elements related to financial assurance, we and the States will carefully consider the IG recommendations related to data links, reports, and similar items. For this early in system development, we are not prepared to reach final conclusions on the specific enhancements suggested by the IG; see our specific comments in Attachment II.

Recommendation 3.1

Establish effective mechanisms of communication with State and regional financial assurance staff. This should include development and maintenance of master lists of financial assurance contacts, as well as implementation of an automated mechanism for information sharing and communication. State and regional expertise could be leveraged for this process, including the development of a communications working group with State and/or regional responsibility for specific areas.

EPA Response:

We generally agree. EPA will implement an information sharing mechanism through QuickPlace for financial assurance. We will make this system available to both regional and State financial assurance experts. EPA will maintain a list of regional financial assurance contacts. With respect to State contacts, the currency of the list will depend largely upon the States updating them. For the sake of continuity, some States may choose to use management personnel as the contact persons. We will also explore with States the feasibility of maintaining a communications working group, and we will continue to hold our regular conference calls with the States.

Recommendation 3.2

With input and assistance from States and regions, define the guidance necessary for States to manage their programs. Guidance should include checklists and best practices for each mechanism. Guidance could be developed in a workgroup environment using State and regional resources, and could use products already developed and in use by some States.

EPA Response:

EPA agrees that appropriate guidance needs to be developed, based on input and assistance from the States and regions. We will work closely with the States in identifying priority areas. The timing of developing such guidance will depend on the resources that are available.

Recommendation 3.3

EPA should develop mechanisms to ensure adequate oversight of State programs by EPA regions.

EPA Response:

EPA agrees. OSWER will request that regions incorporate financial assurance into routine state oversight activities. OECA has developed guidance, the State Review Framework, which is being used by OECA and Regions to review state enforcement and compliance assurance programs. It describes how EPA will evaluate the enforcement and compliance assurance components of authorized or approved environmental programs implemented by the States. The scope of the review will include activities and outcomes related to compliance monitoring, inspections, and civil enforcement, as well as assistance and innovative programs.

Recommendation 3.4

EPA should continue providing financial assurance training and explore mechanisms to facilitate State participation. This could include offering training in conjunction with conferences from which State travel costs may be covered, providing additional travel funds for States, and offering training to specific States.

EPA Response:

EPA continues to provide financial assurance training on the mechanisms, and explore mechanisms to facilitate State participation. For example, we have provided over the past several months mini-training courses on the financial mechanisms in several States and regions. This training has been well-received and we plan to continue this type of training as funding permits. Financial assurance experts from the States typically do not attend conferences from which State travel costs may be covered. However, we continue to look for opportunities to provide financial assurance training, which may, depending on the type of audience at the conference, facilitate another opportunity to provide specific training regarding financial mechanisms or other training with regard to financial assurance.

Chapter 4, Recommendation 4.1

Develop and communicate EPA's plan for addressing concerns with the existing financial assurance regulations, including captive insurance, the financial test, expansion of financial assurance beyond TSDFs, corrective action, and post-closure coverage beyond 30 years. The plan should include milestones, decision points, and timelines for taking action, and indicate when and how EPA will determine if a rulemaking is necessary.

EPA Response:

EPA agrees that a plan for addressing any concerns identified should be developed, but believes that we need to complete the analyses being conducted as a result of the Superfund 120 Day Study and be further along in the EFAB process before answering the questions of whether rule changes are needed and if so, what they are. Once this assessment is completed, we would expect to put together a plan for addressing the appropriate concerns.

Distribution

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