



OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

EPA Needs to Track Compliance with Superfund Cleanup Requirements

Report No. 08-P-0141

April 28, 2008

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Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
EPA	U.S. Environmental Protection Agency
GAO	Government Accountability Office
NPL	National Priorities List
OECA	Office of Enforcement and Compliance Assurance
OIG	Office of Inspector General
OSWER	Office of Solid Waste and Emergency Response
SNC	Substantial Non-Compliance



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

We conducted this review to evaluate whether the U.S. Environmental Protection Agency (EPA) has resolved violations to Superfund enforcement instruments consistent with its guidance, practice, and authorities.

Background

The Comprehensive Environmental Response, Compensation, and Liability Act provides EPA with multiple enforcement authorities to compel responsible parties to conduct and pay for Superfund cleanups. Under its authority, EPA can implement Superfund enforcement instruments to ensure that responsible parties address environmental contamination at Superfund sites. EPA is responsible for enforcing the terms specified in Superfund enforcement instruments, including taking action when violations occur.

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/2008/20080428-08-P-0141.pdf

EPA Needs to Track Compliance with Superfund Cleanup Requirements

What We Found

According to EPA's Superfund information system, there were 3,397 active Superfund enforcement instruments to ensure cleanups at National Priorities List sites as of September 30, 2007. Yet, EPA does not nationally compile or track data on substantial non-compliance (SNC) with the terms or requirements of these instruments. Therefore, we were not able to fully determine whether the regions have resolved Superfund instrument violations consistent with criteria and authorities. In 2000, though, EPA recognized it needed to improve in this area. It issued an internal report recommending that the regions improve their data on the compliance status of Superfund enforcement instruments and responses to non-compliance. However, EPA has not implemented this recommendation. Consequently, the Agency lacks the internal controls necessary to monitor compliance with Superfund instruments nationally.

In a limited review of EPA regions' enforcement records, we found that two regions' enforcement actions, in 12 instances of SNC, were consistent with EPA guidance and authorities. While the regions took appropriate actions to address these 12 violations, Region 5 had not established necessary and enforceable requirements to address contamination from the Muskego Landfill Site, in Waukesha County, Wisconsin.

What We Recommend

We recommend that EPA track and monitor substantial non-compliance by using and modifying, as appropriate, the existing Superfund information system. We also recommend that EPA establish enforceable response actions to address contamination from the Muskego Landfill Site. EPA agreed with our recommendations and proposed responsive actions to address them.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

April 28, 2008

MEMORANDUM

SUBJECT: EPA Needs to Track Compliance with Superfund Cleanup Requirements
Report No. 08-P-0141

FROM: Wade T. Najjum 
Assistant Inspector General
Office of Program Evaluation

TO: Granta Nakayama
Assistant Administrator
Office of Enforcement and Compliance Assurance

Mary Gade
Region 5 Administrator

This is our report on the subject evaluation 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 has identified and corrective actions the OIG recommends. The OIG responded to the Agency's draft report comments by making changes to the report and providing responses to EPA, as appropriate. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established resolution procedures.

The estimated cost of this report – calculated by multiplying the project's staff days by the applicable daily billing rates in effect at the time – is \$326,997.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days. Your response should include a corrective action plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public. This report will be available at <http://www.epa.gov.oig>.

If you or your staff have any questions regarding this report, please contact Carolyn Copper, Director for Program Evaluation, Hazardous Waste Issues, at (202) 566-0829 or copper.carolyn@epa.gov; or Mike Owen, Project Manager, at (206) 553-2542 or owen.michael@epa.gov.

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Purpose

We sought to determine whether violations to Superfund instruments have been resolved consistent with Agency guidance, practice, and authorities. We addressed the following questions:

1. What is the universe of Superfund instruments and how many of these instruments have previous or current compliance violations?
2. What are the Agency's guidance, policy, and authorities for enforcing Superfund instruments?
3. How does the Agency track Superfund instrument violations and actions taken to address the violations?
4. Have responses to and resolution of violations of Superfund instruments been consistent with Agency enforcement guidance, policy, and authorities?

Background

In 1980, Congress established the Superfund program under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to clean up the Nation's worst hazardous waste sites. Through CERCLA, EPA has the authority to require that responsible parties conduct site cleanups. The highest priority sites are designated as Superfund National Priority List (NPL) sites. Responsible parties who agree to clean up Superfund sites can reach settlement agreements with EPA. Settlement agreements include specific work requirements for the site. They also include provisions for resolving disputes and assessing penalties for non-compliance. To document settlements, EPA uses administrative orders on consent or judicial consent decrees. EPA also has the authority to issue unilateral administrative orders if the responsible party refuses to enter into a settlement or refuses to perform work.

EPA is responsible for enforcing the terms specified in settlement agreements and unilateral administrative orders (Superfund instruments). If a responsible party does not comply with the terms of a Superfund instrument, EPA can take actions to bring them into compliance. These options typically range from informal negotiations to referrals to Department of Justice.

EPA's Office of Enforcement and Compliance Assurance (OECA) is responsible for managing the enforcement aspects of the Superfund program. OECA's responsibilities include developing and implementing national Superfund enforcement policy. OECA also provides national direction and legal support to EPA's 10 regional offices. EPA's regional offices have primary responsibility for getting responsible parties to conduct and pay for Superfund cleanups.

Scope and Methodology

We conducted this review in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and

conclusions based upon our objectives. We performed our review from July 2006 to May 2007. We evaluated violations meeting an OECA definition for substantial non-compliance (SNC). In a 2000 report, OECA defined SNC as a violation that:

- exacerbates a hazardous substance release or threatened release of a hazardous substance;
- significantly differs from the terms of the Superfund instrument;
- represents a pattern of recalcitrance or chronic non-compliance; and/or
- is deemed substantial by the region for other reasons.

The Agency does not maintain national data on violations of these Superfund instruments. To assess regional responses to compliance violations, we reviewed all instances of SNC identified since January 2001 by Regions 5 and 9. We excluded from our review violations related to responsible parties' obligations to pay EPA for Superfund costs. We also excluded violations involving Federal facility Superfund sites.

Appendix A provides further details on our scope and methodology.

Noteworthy Achievements

In November 1998, OECA initiated an internal effort to assess responsible party compliance with active Superfund instruments. The review evaluated whether responsible parties were meeting their Superfund commitments in a timely and satisfactorily manner. The study included obtaining and reviewing Superfund instrument information from all 10 EPA regional offices. The Agency released its report on the study in September 2000. The study found that responsible parties complied with more than 90 percent of active Superfund instruments. The report also provided several recommendations to improve enforcing Superfund instruments and improve instrument and compliance data.

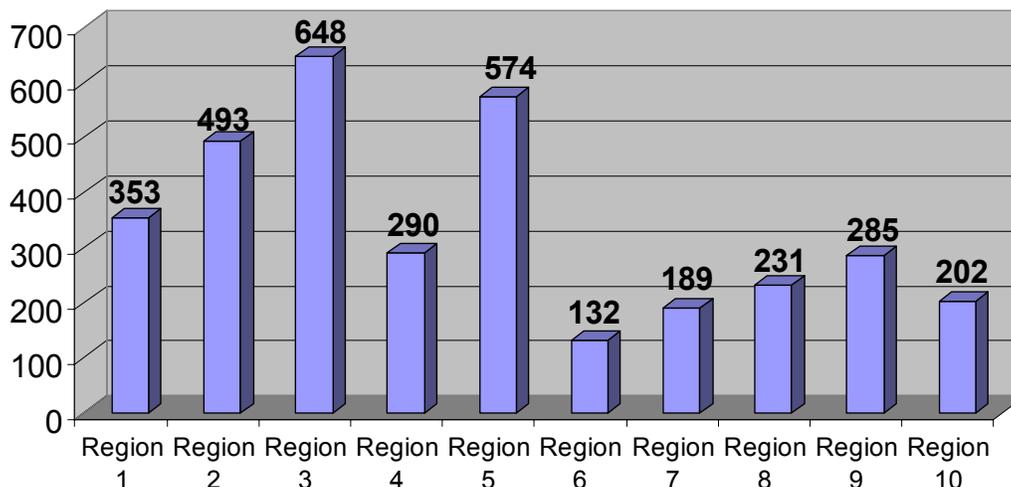
EPA Has a Large Universe of Superfund Instruments

EPA had 3,397 active Superfund instruments establishing cleanup obligations for sites on the NPL as of September 30, 2007. We identified the number of active Superfund instruments from data provided by the Agency through its Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS, or Superfund information system).¹ The number of active instruments excludes enforcement instruments for sites not on the NPL and instruments involving responsible party payment obligations. As shown in Figure 1, the number of active instruments also varies among the regions.

We were unable to determine, in a comprehensive manner, how many of these Superfund instruments have previous or current compliance violations. EPA does not compile or track this information.

¹ The number of instruments may include enforcement instruments that have been completed and fully complied with, but have not yet been closed out of CERCLIS. According to an OECA official, OECA is working with the regions to close out enforcement actions where all response actions have been completed and all payment obligations have been satisfied.

Figure 1 - Total Number of Active Superfund Instruments for NPL Sites by Region.



Source: OIG analysis of EPA's CERCLIS data.

EPA's Enforcement Process Provides Flexibility

Sections 104, 106, 107, and 122 of CERCLA provide EPA legal authority to enforce the cleanup of NPL sites and recover cleanup costs from responsible parties. The Agency has the authority to:

- Perform cleanups at a site and later recover the costs from responsible parties.
- Enter into settlement agreements with responsible parties to clean up a site or pay for a cleanup conducted by EPA.
- Order responsible parties to perform a cleanup at a site, with the option of imposing penalties if they fail to comply with the order.

EPA has established its process for addressing non-compliance with Superfund instruments in guidance documents. This includes *Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies* and the *Interim CERCLA Settlement Policy*. In addition, EPA has summarized processes for addressing non-compliance in the Agency's Superfund enforcement training manual.

EPA guidance communicates general steps that may be taken to respond to violations. The guidance does not establish standard responses by violation type. The guidance also does not specify time requirements for addressing and resolving a violation. According to guidance documents and OECA managers, the Superfund enforcement process is flexible and depends on several factors, including: (1) the responsible party's compliance history, (2) site conditions, (3) duration of non-compliance, and (4) severity of non-compliance.

The regions have first line responsibility to enforce the requirements and terms in Superfund instruments. Regions 5 and 9 assign a remedial project manager and attorney to each NPL site.

The remedial project manager and site attorney are responsible for ensuring that the responsible party complies with the terms of the Superfund instruments. Our review of EPA's guidance and interviews of managers and staff from the two regions disclosed that the regions' responses to violations typically include the following steps:

- Attempt to resolve the dispute informally.
- Issue a formal notice of deficiency.
- For an administrative order on consent or consent decree, invoke formal dispute resolution procedures, as outlined in the instrument.
- Take enforcement actions. These actions may include: (a) penalties, (b) EPA takeover of site work, and (c) referral to the Department of Justice.

EPA Does Not Nationally Track Superfund Non-Compliance

The Agency does not track SNC with Superfund instruments nationally. As a result, EPA does not have the data to measure how well, or whether, it is addressing and resolving SNC in the Superfund program. This is a weakness in internal controls for assuring compliance with Superfund requirements.

OECA and Region 9 Do Not Track Violations

Although OECA is responsible for managing Superfund enforcement, it does not track SNC with Superfund instruments. The Agency also does not require the regions to track SNC with Superfund instruments. However, one of the two regions we reviewed centrally tracks violations of these instruments for sites in their region. Region 5 centrally tracks all violations using a compliance field in CERCLIS. This field identifies the status of Superfund instruments using compliance designations. These designations include: (1) In Compliance, (2) In Violation – No Action Planned, (3) In Violation – Action Planned, or (4) In Violation – Action Taken. According to a Region 5 manager, the Region uses this field to monitor the compliance status of its Superfund instruments. Region 9, however, does not centrally track compliance violations or responses to violations. Instead, the remedial project manager responsible for managing the site generally tracks each violation and its resolution on a site-specific basis. As a result, Region 9 has fewer controls to track violations and their resolution than Region 5.

Lack of Data Prevents OECA from Determining Compliance

Due to the lack of a national system, OECA has limited information for assessing SNC with Superfund instruments. OECA recognized and attempted to address this weakness in an internal 2000 report. However, EPA did not implement the report's recommendation that regions improve the compliance data they report in CERCLIS, because OECA agreed to alternative actions. According to an OECA senior attorney, the regions were opposed to implementing the 2000 internal report recommendation. The regions agreed, as an alternative, to monitor non-compliance themselves.

Implementing the recommendation could improve national data and internal controls over tracking SNC issues and their resolution. However, to improve the Agency's visibility over

violations, OECA will need to restrict using the compliance field in CERCLIS to issues that meet OECA's definition for SNC. Now, the Agency's definition of non-compliance for this field is very general and includes minor violations of Superfund instruments. The Agency should also add date fields in CERCLIS to provide data for EPA managers to measure the time taken to resolve violations. CERCLIS does not include fields that identify non-compliance and return to compliance dates. OECA managers informed us in September 2007 that OECA is working with the regions to address this issue. OECA and the regions are working to establish a national tracking system for SNC using CERCLIS. They said that OECA was taking this action in response to our evaluation work.

Regions' Responses to Violations Were Consistent with Agency Enforcement Guidance, Policy, and Authorities

Because no national data exists for instances of Superfund SNC, we could not fully evaluate the Agency's responses to and resolution of SNC with Superfund instruments. However, we found that the responses of Regions 5 and 9, addressing 12 instances of SNC, were consistent with Agency guidance, policy, and authorities. While these Regions took appropriate enforcement actions for these 12 violations, Region 5 had not established enforceable response requirements for groundwater contamination migrating from the Muskego Landfill Site. This issue does not violate existing Superfund instruments for the site. Rather, it represents a new issue where the region has not established a Superfund instrument to address additional contamination from the site.

Regions Took Appropriate Actions to Address Violations

The 12 instances of SNC occurred at 11 sites in Region 5 and 9 where responsible parties generally failed to perform portions of the required work or did not provide adequate site access. The responsible parties typically did not comply with the Superfund instruments because they either disputed liability or had technical issues with the remedy design. The regions usually tried to resolve the issues informally through meetings and letters. If these efforts were not successful, the regions issued a formal notice of deficiency. In six of the cases, negotiations followed the notices of deficiencies. The regions reached settlements with the responsible parties resolving the violations for the six cases. In the more serious cases, the regions invoked penalties as part of their enforcement actions. For example, at a site in Region 9, the responsible party continually refused to perform the required work even though the Region issued multiple notices of deficiency and an additional unilateral administrative order. Because of the multiple violations, the Region required the responsible party to pay a penalty of \$500,000. The Region also required the responsible party to conduct a \$1 million supplemental environmental project and pay EPA \$6.7 million for past costs.

Region 5 Needs to Improve Enforcement Activities at the Muskego Landfill Site

Region 5 has not established requirements for the party responsible for cleaning up the Muskego Landfill site, in Waukesha County, Wisconsin, to address contaminated groundwater that has migrated from the site. As a result, the responsible party has not submitted requested information and has made little progress towards addressing the contamination.

In late 1997 and early 1998, the State of Wisconsin detected contamination from Muskego Landfill in several off-site residential wells. According to Region 5 managers and staff, this off-site contamination does not pose an immediate threat to human health. The threat has been addressed, they said, because the residences with contaminated wells have been connected to municipal water. However, Region 5 staff said that they have not been able to obtain documentation from the responsible party verifying that the residences have been provided municipal water. According to the staff, the Region has requested this information on multiple occasions, but the responsible party has not complied with the requests. Consequently, the Region could not, and has not, assured that residences with contaminated wells have been provided a potable water source.

Since at least January 1999, the Region requested, in meetings and with letters, that the responsible party investigate the groundwater contamination, but delays have taken years. For example, Region 5 requested in a January 1999 letter that the responsible party submit a workplan for characterizing the off-site contamination within 30 days. Despite this request and subsequent followup activities, the Region was unable to obtain an acceptable workplan from the responsible party until August 2005 -- more than 6 years later. Region 5 staff said that the responsible party submitted several draft versions of the workplan that the Region found to be deficient and they requested revisions. Because of the long delay with completing the workplan, the Region did not receive an acceptable groundwater characterization report from the responsible party until December 2006. The Region has reviewed the report and is identifying sampling requirements necessary to complete a supplemental remedial investigation of the off-site groundwater contamination. Our review of data in the report identified that the groundwater contamination has migrated towards a municipal water supply well (Municipal Well #7) and several additional residential wells. These wells may be at risk of becoming contaminated in the future.

According to a Region 5 manager and staff, data and funding issues for the site limited the Region's enforcement options that are outlined by EPA guidance. The manager and staff thought that the Region did not have enough data on the contamination source to support the case for issuing an additional unilateral administrative order to establish response requirements for the off-site contamination. The staff also said that the Region did not take over the response because it would have been difficult to convince EPA's Office of Solid Waste and Emergency Response (OSWER) to approve funding for the work. The staff explained that the responsible party for the site has the ability to pay for the work and OSWER usually reserves funding for sites without viable responsible parties that have significant problems. Therefore, the Region did not request funding from OSWER. Because of these issues, the Region's manager and staff felt that pursuing negotiations with the responsible party was the best approach for getting the off-site contamination cleaned up. The Region began these negotiations with the responsible party in 1999.

Region 5's continuing negotiations with the responsible party has achieved very little progress towards addressing the off-site contamination and ensuring that human health and the environment are protected. The Region must implement better controls to ensure protection to human health and the environment, such as using a Superfund instrument that provides specific response actions and milestones to address the off-site contamination issues.

In September 2007, Region 5's Superfund Director notified us that the Region was in a much stronger position to aggressively enforce compliance, because it has obtained additional data on the off-site contamination. The Director also informed us that the Region has developed a plan for establishing enforceable response actions and milestones for addressing the off-site contamination issues. With regard to contaminated residential wells, the Director informed us that the Region has been sampling residential wells over the past few years. The Director also disclosed that the Region has recently begun an additional round of sampling to further verify and confirm that all residential drinking water wells remain safe to use. The Region's reported actions are needed steps towards verifying contamination in the residential wells near the site. However, to fully assure that residents with contaminated wells have safe drinking water, the Region will need to verify that these residences have been provided a potable water source.

Recommendations

We recommend that the Assistant Administrator for OECA:

1. Request that the regions input compliance status data for Superfund instruments in CERCLIS. Limit the CERCLIS input for the "In Violation" designations to issues that meet OECA's definition for SNC.
2. Add data fields in CERCLIS to capture dates when SNC with Superfund instruments was identified and resolved. Request that the regions input this data into CERCLIS.
3. Annually review the CERCLIS compliance data to monitor Agency status and progress in managing SNC with Superfund instruments.
4. Establish parameters or metrics that indicate an acceptable range of performance or circumstances requiring explanation.
5. Monitor Region 5's progress in establishing an enforceable Superfund instrument for the Muskego Landfill Site that provides specific response actions and milestones to address the off-site contamination issues. If Region 5 is unable to finalize this Superfund instrument, take appropriate actions to ensure that enforceable response actions and milestones to address the contamination issues are established.

We recommend that the Administrator for Region 5:

6. Verify that residences with groundwater wells contaminated from the Muskego Landfill Site either have been connected to municipal water or provided with some other potable water source. Region 5's verification should include a review of appropriate sampling data to ensure that all residential wells contaminated by the site have been identified. The Region should also visit the residences with contaminated wells to confirm that the residents have been provided with potable water.

Agency Comments and OIG Evaluation

The OIG received comments on the draft report from OECA and Region 5 and we made changes to the report where appropriate. Appendix B provides the full text of the Agency's comments and the OIG's response.

OECA agreed with all recommendations for their action (Recommendations 1 through 5) and described corrective actions that are in process or planned. However, OECA will need to provide specific milestones for completing Recommendations 3 and 4 in its response to this report. For example, OECA will need to include a specific completion date for establishing a baseline for the status of compliance with Superfund enforcement instruments in its response for Recommendation 3. OECA will also need to provide a specific completion date for establishing a metric for acceptable performance by the Regions in its response for Recommendation 4. OECA said in its response that the evaluation and recommendations will enhance its ability to track and evaluate compliance with Superfund enforcement instruments on a national basis. Until OECA implements corrective actions for Recommendations 1 through 5 they will remain open in OIG tracking systems.

Region 5 agreed with the recommendation for its action (Recommendation 6) and described generally responsive corrective actions that are in process or planned. However, Region 5 will need to provide details on its corrective actions and a milestone for completing the actions in its response to this report. For example, the Region's response should describe how it has or plans to verify that all residences with contaminated wells have been connected to municipal water or provided some other potable water source. The Region's response will also need to include a specific date for completing this corrective action. In its response, Region 5 commented that EPA is pursuing a new Superfund Administrative Order requiring work to address the off-site contamination from the Muskego Landfill Site as suggested by the draft report. Until Region 5 implements corrective actions for Recommendation 6, it will remain open in OIG tracking systems.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Claimed Amount	Agreed To Amount
1	7	Request that the regions input compliance status data for Superfund instruments in CERCLIS. Limit the CERCLIS input for the "In Violation" designations to issues that meet OECA's definition for SNC.	O	Assistant Administrator for OECA	03/31/09		
2	7	Add data fields in CERCLIS to capture dates when SNC with Superfund instruments was identified and resolved. Request that the regions input this data into CERCLIS.	O	Assistant Administrator for OECA	03/31/09		
3	7	Annually review the CERCLIS compliance data to monitor Agency status and progress in managing SNC with Superfund instruments.	O	Assistant Administrator for OECA			
4	7	Establish parameters or metrics that indicate an acceptable range of performance or circumstances requiring explanation.	O	Assistant Administrator for OECA			
5	7	Monitor Region 5's progress in establishing an enforceable Superfund instrument for the Muskego Landfill Site that provides specific response actions and milestones to address the off-site contamination issues. If Region 5 is unable to finalize this Superfund instrument, take appropriate actions to ensure that enforceable response actions and milestones to address the contamination issues are established.	O	Assistant Administrator for OECA	06/30/08		
6	7	Verify that residences with groundwater wells contaminated from the Muskego Landfill Site either have been connected to municipal water or provided with some other potable water source. Region 5's verification should include a review of appropriate sampling data to ensure that all residential wells contaminated by the site have been identified. The Region should also visit the residences with contaminated wells to confirm that the residents have been provided with potable water.	O	Administrator for Region 5			

¹ O = recommendation is open with agreed-to corrective actions pending
 C = recommendation is closed with all agreed-to actions completed
 U = recommendation is undecided with resolution efforts in progress

Details on Scope and Methodology

We conducted this review in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. At the request of an OECA manager, our work was officially suspended from August to October 2006, to accommodate a heavy workload the regions experienced at the end of the fiscal year. Our scope generally covered EPA's activities for enforcing Superfund instruments from January 2001 through September 2006. To gain an understanding of EPA's process for enforcing Superfund instruments, we interviewed managers and staff from OSWER, OECA, Region 5, and Region 9. We reviewed CERCLA and EPA guidance documents. We also reviewed other records applicable to EPA's enforcement process and activities for Superfund instruments.

We reviewed CERCLIS information provided by OECA. The CERCLIS data identified the universe of active administrative orders on consent, consent decrees, and unilateral administrative orders (i.e., Superfund instruments) for work obligations for sites on the NPL as of September 30, 2007. The Agency does not maintain national data on violating these instruments. Therefore, we were not able to identify the universe of violations for these instruments. We conducted limited testing of the Superfund instrument universe to verify the accuracy of the data. We compared the site name, Superfund instrument type, and instrument dates in CERCLIS with supporting records for 12 sites identified by Regions 5 and 9 with compliance issues during the period from January 2001 through September 2006. Our testing did not identify any major discrepancies with site names, instrument types, or instrument dates between the CERCLIS data and supporting records.

The Agency does not maintain national data on violations of these instruments. To assess regional responses to compliance violations, we reviewed violation information and supporting response and resolution records we obtained from Regions 5 and 9. We also interviewed remedial project managers and site attorneys from the two Regions. We conducted these interviews to gain a complete understanding of the violations and the Regions' responses addressing the violations. We selected these two Regions primarily to provide geographical coverage of the central and western United States. These Regions were also selected because they had the highest number of Superfund instruments, respective to geographical location. Our review focused on SNC with Superfund instruments that were active as of September 30, 2006.

We reviewed instances of SNC reported to us by Regions 5 and 9. We reviewed all instances of SNC identified between January 2001 and September 2006 by Region 5 and 9. We excluded from our review violations related to responsible parties' obligations to pay EPA for Superfund costs. We also excluded violations involving Federal facility Superfund sites. For Region 5, we evaluated 5 of the 13 reported violations. Eight of the violations reported by Region 5 were excluded from review because they involved responsible party payment obligations, were incorrectly reported as a violation, involved a Federal facility site, or were overturned by a

United States court. We evaluated seven out of the nine violations reported by Region 9. Two of the violations reported by Region 9 were excluded from review because they involved responsible party payment obligation issues. Our evaluation included reviews of relevant site documents and Agency correspondence. We also interviewed remedial project managers and site attorneys.

To assess internal controls, we evaluated the Agency's procedures and records for tracking and addressing SNC with Superfund instruments. We found that the Agency needs to implement a national tracking system for SNC with Superfund instruments to provide assurance that EPA is complying with applicable laws and regulations as communicated in legally binding Superfund instruments.

The Government Accountability Office (GAO) issued a report entitled *EPA Should Do More To Ensure That Liable Parties Meet Their Cleanup Obligations* (GAO-05-658, August 2005). This report found that EPA was not aggressively enforcing financial assurance requirements in cleanup orders and agreements. The report made multiple recommendations to the Agency to improve implementation, management, and enforcement of these requirements. The Agency was taking corrective actions in response to this report at the time of our review. As a result, we did not conduct follow-up work on GAO's findings and recommendations.

Agency Response to Draft Report and OIG Evaluation

OECA Response to Draft Report

MEMORANDUM

DATE: March 21, 2008

SUBJECT: Response to “Draft Evaluation Report: EPA Cannot Determine the Extent of Substantial Non-Compliance in Superfund Cleanups; Assignment No. 2006- 01400”

FROM: Catherine R. McCabe /s/
Principal Deputy Assistant Administrator

TO: Carolyn Copper
Director for Program Evaluation
Hazardous Waste Issues
Office of Inspector General

Thank you for the opportunity to comment on the subject draft report on tracking compliance with Superfund enforcement instruments. In this memorandum, we will be responding to Recommendations 1 through 5. Region 5 will be responding under separate cover to Recommendation 6.

The Office of Enforcement and Compliance Assurance (OECA) believes there was an open dialogue on this subject and the evaluation and recommendations will enhance OECA’s ability to track and evaluate compliance with Superfund enforcement instruments on a national level. We would like your office to reconsider the title of this report because we do not believe it accurately reflects the report’s findings. We suggest the report’s title be changed to “EPA Needs to Track Compliance with Superfund Enforcement Agreements Nationally.” We are concerned that the report title may, in itself, generate unnecessary inquiries, and we would prefer to focus on implementing the OIG’s recommendations.

OIG Response

We changed the report title to *EPA Needs to Track Compliance with Superfund Cleanup Requirements*.

Before addressing the specific recommendations, I would like to clarify a point made in the draft report. In the summary, “At a Glance,” (What We Found), and on pages 2 and 3, “EPA Has a Large Universe of Superfund Instruments,” it is noted that “EPA had 3,397 active Superfund instruments for cleanup obligations for sites on the NPL as of September 30, 2007.” It should be

made clear that this is the number of active Superfund enforcement instruments in CERCLIS and does not include enforcement instruments for non-NPL actions nor does it include enforcement instruments for cost recovery. That number may also include enforcement instruments that have been completed and fully complied with but have not yet been closed out in CERCLIS. We are currently working with the Regions to close out enforcement actions where all response actions have been completed and all cost recovery obligations satisfied. Once this effort is complete, we will be able to determine accurately the total number of active enforcement actions for response (NPL and non-NPL) and cost recovery.

OIG Response

We revised the statement in the “At a Glance” to read as follows: “According to EPA’s Superfund information system, there were 3,397 active Superfund enforcement instruments to ensure cleanups at National Priorities List sites as of September 30, 2007.” We also clarified the content of universe of Superfund instruments discussed on pages 2 and 3 by adding the following statements: “We identified the number of active Superfund instruments from data provided by the Agency through its Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS or Superfund information system). The number of active instruments excludes enforcement instruments for sites not on the NPL and instruments involving responsible party payment obligations.” The following footnote was also added on page 2: “The number of instruments may include enforcement instruments that have been completed and fully complied with, but have not yet been closed out of CERCLIS. According to an OECA official, OECA is working with the regions to close out enforcement actions where all response actions have been completed and all payment obligations have been satisfied.”

With respect to Recommendations 1 through 5, OECA provides the following:

Recommendation 1 - Request that the regions input compliance status data for Superfund [enforcement] instruments in CERCLIS. Limit CERCLIS “In Violation” designations to issues that meet OECA’s definition of SNC [Substantial Noncompliance].

OECA Response: OECA agrees with this recommendation and has already established two workgroups to address this issue. The first is comprised of Regional attorneys, enforcement specialists and Remedial Project Managers (RPMs) and has been charged with defining “Substantial Noncompliance” (SNC) with respect to Superfund enforcement instruments. In its FY 2000 report, EPA established a SNC definition, but it was not fully vetted with the Regions and only addressed SNC with respect to enforcement agreements for response actions. The current workgroup will be addressing SNC for removal and remedial response actions as well as compliance with cost recovery actions. We anticipate that this workgroup will complete its work by the first quarter of FY 2009. We will then issue a guidance outlining the SNC definition, the types of actions for which compliance monitoring will be required in CERCLIS, and the frequency with which that data should be reviewed and updated. This workgroup has already had two conference calls and will convene bi-weekly until it completes its tasks.

In addition, we have formed a workgroup comprised of Regional CERCLIS Information Management Coordinators to identify the system enhancements that will be required to allow Regions to track and update compliance information in CERCLIS effectively and efficiently. First, the workgroup will identify changes to the current CERCLIS compliance screens that are necessary to implement the Inspector General's recommendations. The workgroup will also identify user requirements to make updating the CERCLIS information more efficient. Though the current configuration was designed for decentralized data entry directly by RPMs, a number of Regions use centralized data entry for compliance tracking, including Region 5, and the current system is cumbersome to update. OECA will work with the Regions and OSWER, the owners of the CERCLIS data base, to implement these enhancements. The initial enhancements should be implemented in the second quarter of FY 2009. Until a full requirements analysis is completed, however, we cannot determine a date for completing the second set of CERCLIS changes to enhance data entry efficiency. This workgroup has also had two conference calls and will convene bi-weekly until it has completed its tasks.

OIG Response

OECA's corrective actions in process meet the intent of our recommendation. The recommendation is open with agreed-to actions pending.

Recommendation 2 - Add data fields in CERCLIS to capture the dates when SNC with Superfund [enforcement] instruments was identified and resolved. Request that the regions input this data into CERCLIS.

OECA Response: OECA agrees with this recommendation and will, in modifying CERCLIS, allow Regions and Headquarters to identify when there is substantial non-compliance with an enforcement action and when the parties returned to compliance. This will be implemented consistent with the initial CERCLIS enhancements by the second quarter of FY 2009.

OIG Response

OECA's corrective action in process meets the intent of our recommendation. The recommendation is open with agreed-to actions pending.

Recommendation 3 - Annually review CERCLIS compliance data to monitor Agency status and progress in managing SNC with Superfund [enforcement] instruments.

OECA Response: OECA agrees with this recommendation. Once SNC is defined and initial CERCLIS enhancements are in place, we will pull the CERCLIS data to establish a baseline for the status of compliance with Superfund enforcement instruments. OECA anticipates this will occur late in FY 2009, and we will repeat the evaluation annually thereafter.

OIG Response

OECA's planned corrective action meets the intent of our recommendation. However, OECA will need to provide a more specific milestone date for completing the corrective action in its response to the final report. The recommendation is open with agreed-to actions pending.

Recommendation 4 - Establish parameters or metrics that indicate an acceptable range of performance or circumstances requiring explanation.

OECA Response: OECA agrees with this recommendation. Once we establish a baseline of compliance status in FY 2009, we will establish a metric for the range of acceptable performance and a threshold for when Regions will be required to substantiate why the SNC threshold was exceeded. This would likely be implemented in FY 2010, once a baseline has been established and the data evaluated.

OIG Response

OECA's planned corrective action meets the intent of our recommendation. However, OECA will need to provide a more specific milestone date for completing the corrective action in its response to the final report. The recommendation is open with agreed-to actions pending.

Recommendation 5 - Monitor Region 5's progress in establishing an enforceable Superfund enforcement instrument for the Muskego Landfill Sites that provides specific response actions to address off site contamination. If Region 5 is unable to finalize this Superfund [enforcement] instrument, take appropriate actions to ensure that enforceable response action and milestones to address the contamination issues are established.

OECA Response: OECA agrees with this recommendation. It is our understanding that Region 5 has developed an enforcement instrument that meets the requirements outlined by your office to address the off site contamination at the Muskego Landfill Site. We expect that the Regions actions will address the OIG's concerns and will be completed by the end of the 3rd quarter of FY 2008. If the Region is unsuccessful, we will work with them to ensure that an enforcement instrument is in place as expeditiously as possible.

OIG Response

OECA's planned corrective actions meet the intent of our recommendation. However, OECA will need to provide a more specific milestone date for completing the corrective actions in its response to the final report. The recommendation is open with agreed-to actions pending.

Again, we appreciate the opportunity to comment on this draft report. Should you have any questions or concerns regarding this response, please contact OECA's Audit Liaison, Gwendolyn Spriggs on 202-564-2439.

cc: M. Owen (OIG)
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M. Schneider (OAP)
G. Spriggs (OAP)
M. Gade (Region 5)

Region 5 Response to Draft Report

R-19J

DATE: March 19, 2008

SUBJECT: U. S. Environmental Protection Agency, Region 5 Response to the Office of Inspector General's Discussion Draft Findings for the Report: "EPA Cannot Determine the Extent of Substantial Non-Compliance in Superfund Cleanups"

FROM: Mary A. Gade /s/ Walter Kovalick for
Regional Administrator

TO: Carolyn Copper
Director for Program Evaluation
Office of Program Evaluation
Office of Inspector General

Thank you for providing the United States Environmental Protection Agency, Region 5 the opportunity to comment on the Office of Inspector General's (OIG's) Draft Evaluation Report "EPA Cannot Determine the Extent of Substantial Non-Compliance in Superfund Cleanups," Assignment No. 2006-01400, dated February 21, 2008. I am responding to issues raised in the report relative to the Muskego Sanitary Landfill Site (Site) and, specifically, Recommendation #6.

Response to Discussion:

EPA is aware of the issues discussed in the OIG's draft report and has articulated its concerns about the off-site contamination in past Five-Year Review evaluations. EPA will also be amending the Record of Decision to modify the required remedial action to ensure that the remedy remains protective of human health and the environment.

OIG Response

We agree that the Region's 1999 and 2004 five-year review reports articulated concerns about the off-site contamination and included recommendations associated with those concerns. However, as discussed in the draft report, the Region had not established requirements for the responsible party to address the contaminated groundwater that has migrated from the site at the time of our review. The Region's plan to amend the Record of Decision is a needed step towards establishing a remedy for the off-site contamination that provides long-term protection to human health and the environment.

In the past, EPA approached the potentially responsible parties (PRPs) to undertake the additional work under the existing 1995 Unilateral Administrative Order (UAO). Those PRPs performed the remedial actions required under that UAO to address on-site groundwater contamination. The PRPs denied that the additional work was required under the UAO, but agreed to conduct further sampling and investigation. Off-site contamination was not identified in the Remedial Investigation/Feasibility Study (RI/FS) and was not discovered until after the on-site groundwater remedy was constructed. In addition, EPA believed all potentially impacted residents were connected to a public drinking water source.

In December 2007, EPA received a revised Expanded Groundwater Monitoring Report from the PRPs, which included a listing of all private well locations and all municipal drinking water hookups in the study area as requested by EPA. With the revised Expanded Groundwater Monitoring Report, EPA has a much

better understanding of the contamination plume, the complex hydrogeology in the area, and the potential vulnerability of residential and municipal wells in the area.

EPA is pursuing a new Superfund Administrative Order requiring additional work including specific response actions and milestones to address off-site contamination as the OIG's draft report suggests. Specifically, EPA will issue a notice letter inviting the PRPs to negotiate a Consent Order to perform work identified in a detailed scope of work. If the PRPs will not enter an agreement within 45 days of receipt of the notice letter, EPA will consider other options including, but not limited to, funding the final phase of the off-site groundwater investigation. Whether under an enforcement lead or fund-lead action, the final necessary sampling will be performed in 2008. EPA will then have a complete supplemental RI for the off-site groundwater contamination and will identify and evaluate remedial alternatives for off-site groundwater contamination at the Site before the close of 2008.

OIG Response

The Region's recent response actions that are in process and actions planned should assist EPA with obtaining a complete remedial investigation of the off-site groundwater contamination. These actions should also assist the Region with assuring that a remedy is selected and implemented that provides long-term protection to human health and the environment.

Response to Recommendation #6

Recommendation #6 stated:

"Verify that residences with groundwater wells contaminated from the Muskego Landfill Site either have been connected to municipal water or provided some other potable water source. The Region's verification should include a review of appropriate sampling data to ensure that all residential wells contaminated by the site have been identified. The Region should also visit the residences with contaminated wells to confirm that the residents have been provided potable water."

EPA's Response:

Based upon recent information provided to and developed by EPA, we now have an inventory of all wells in the area that are used for potable purposes and that may be vulnerable to contamination. EPA is currently verifying all municipal well hook-ups. EPA has also required the PRPs to increase the sampling frequency of the municipal and residential wells. Depending on the location and potential vulnerability of the well, some wells are sampled more frequently than others (e.g., monthly, quarterly and annually).

The draft report also correctly notes that contamination has migrated toward Muskego municipal water supply well #7. EPA has required the PRPs to monitor that well and wells in its vicinity to make sure that well #7 continues to be a safe water supply for the City of Muskego. In addition to monthly sampling of well #7 and surrounding monitoring wells, EPA has required additional pumping tests to improve our understanding of the local hydrogeology and modeling. This will allow EPA to develop a supplemental feasibility study to assure the protection of well #7 and residential wells in the area.

We believe that our ongoing sampling efforts have assured the safety of all residential wells, and we have recently initiated another round of drinking water well sampling to further verify and confirm that all residential drinking water wells remain safe for use. If a well is contaminated above safe levels, bottled water will be provided by the PRPs. Municipal water lines may also be extended, as they have been in the past, until a long-term solution can be found. These actions, along with EPA's enforcement and response strategy, will ensure a solution to these complex problems. Additional remedial investigations will support a supplemental Feasibility Study, which will identify and evaluate alternatives to assure long-term protection of any off-site residents and of the municipal well. EPA Region 5 will also keep our Office of Site Remediation Enforcement apprised of our progress and timetables.

OIG Response

Region 5's corrective actions are in process and plan to meet the intent of our recommendation. In its response to the final report, the Region will need to provide more specific details describing how it has verified or plans to verify that all residences with contaminated wells have been connected to municipal water or some other potable water source. The Region will also need to provide a milestone, or milestones, for completing the corrective actions. The recommendation is open with agreed-to actions pending.

Again, we appreciate the opportunity to comment on this draft report. If you have any additional questions, please feel free to contact Sheri L. Bianchin, Remedial Project Manager, at (312) 886-4745 or Thomas Krueger, Associate Regional Counsel, at (312) 886-0562.

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