



OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups

Report No. 2007-P-00026

June 6, 2007



Report Contributors: Carolyn Copper
Tina Lovingood
Barry Parker
Katherine Beam
Kalpana Ramakrishnan

Abbreviations

CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System, also known as the “Superfund Information System”
EPA	U.S. Environmental Protection Agency
GPRA	Government Performance and Results Act
HRS	Hazard Ranking System
NACEPT	National Advisory Council for Environmental Policy and Technology
NAM	National Association of Manufacturers
NPL	National Priorities List
NRD	Natural Resources Damages
OCPL	Office of Congressional and Public Liaison
OECA	Office of Enforcement and Compliance Assurance
OGC	Office of General Counsel
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPE	Office of Program Evaluation
OSRE	Office of Site Remediation Enforcement
OSRTI	Office of Superfund Remediation and Technology Innovation
OSWER	Office of Solid Waste and Emergency Response
PRP	Potentially Responsible Party
RSD	Regional Support Division
SA	Superfund Alternative
SAS	Superfund Alternative Sites
SPIM	Superfund Program Implementation Manual
SSP	Superfund Settlements Project
TAP	Technical Assistance Plan

Cover photo: The Tremont City Landfill is located near Springfield, Ohio, and includes a barrel fill area of about 50,000 buried drums which contain a variety of industrial wastes, bulk liquids, and sludges. Several companies have agreed to clean up the site under EPA’s Superfund Alternative Sites approach. Pictured are workers conducting Phase I remedial investigation activities. *Photo courtesy of EPA Region 5, taken by Ohio EPA and CH2M Hill, Inc.*



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

We evaluated the U.S. Environmental Protection Agency's (EPA's) Superfund Alternative (SA) sites approach. This approach is designed to help achieve EPA's strategic goal of cleaning up hazardous waste sites.

Background

Since the 1980s, EPA has used variations of the SA approach to clean up Superfund National Priorities List (NPL) equivalent hazardous waste sites. The SA approach is an alternative to listing sites on the NPL. The NPL is a list of the Nation's highest priority Superfund sites. Recent reviews have reported problems in EPA's managing and implementing the SA approach.

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/2007/20070606-2007-P-00026.pdf

EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups

What We Found

EPA has not implemented effective management tools or controls for the SA approach. For example, (1) EPA has not finalized the universe of SA sites, (2) it does not have controls over designating SA sites in Superfund information systems or documenting hazard assessments for SA sites, and (3) it only measures results at SA sites for one of six Superfund cleanup measures. Until EPA addresses these limits in management controls and makes these controls more transparent, it cannot demonstrate outcomes and results of the SA approach. These limits impede EPA's ability to make informed decisions about the merits of, or need for, the approach. EPA also has not provided the public reasonable assurance that SA sites rise to the level of NPL sites.

In the recent past, EPA has been criticized for mismanaging the SA approach. External parties (including parties that participate in the SA approach) and an internal EPA study report problems with the approach. These problems are likely to continue until EPA addresses internal Agency recommendations to improve the consistency and transparency of the approach. It is also likely to continue until EPA addresses other management control weaknesses and develops a communication strategy. This strategy should inform the public about SA sites, the benefits of the SA approach, and community involvement opportunities at SA sites. EPA had recognized improvements were necessary and is working to make the approach more transparent and consistent.

What We Recommend

We recommend EPA track and report cleanup progress at SA sites, and improve its communications, information, and transparency about the SA approach. EPA generally concurred with the majority of the recommendations. However, it did not provide sufficient information to describe how or when it would implement them. The Agency will need to provide sufficient information on its actions to address OIG recommendations within 90 days.




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

OFFICE OF
INSPECTOR GENERAL

June 6, 2007

MEMORANDUM

SUBJECT: EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups
Report No. 2007-P-00026

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

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

Susan Parker Bodine
Assistant Administrator
Office of Solid Waste and Emergency Response

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 full cost billing rates in effect at the time – is \$580,283.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days. The Office of Enforcement and Compliance Assurance should coordinate EPA comments on this report and provide a consolidated response. Your response should include a corrective action plan including milestone dates. Please email an electronic

version of your response that complies with Section 508 of the Rehabilitation Act to Tina Lovingood at lovingood.tina@epa.gov. 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 Tina Lovingood, Project Manager, at 202-566-2906 or lovingood.tina@epa.gov.

Table of Contents

Chapters

1	Introduction	1
	Purpose	1
	Background	1
	Scope and Methodology	3
	Prior and Ongoing Reviews	3
	Noteworthy Achievements	3
2	EPA Lacks Reliable Information on the Superfund Alternative (SA) Sites Approach	5
	EPA Does Not Have a Baseline Universe	5
	EPA Lacks Specific Guidance on Designating Superfund Alternative (SA) Sites in the Superfund Information System	5
	EPA Has No Guidance That Defines Criteria for “Adequate” Hazard Ranking System (HRS) Documentation	5
	Recommendations	6
	Agency Comments and OIG Evaluation	7
3	EPA Is Inconsistent in Measuring Results	8
	The Office of Solid Waste and Emergency Response (OSWER) Does Not Track and Report All Cleanup Measures at SA Sites	8
	Recommendations	10
	Agency Comments and OIG Evaluation	10
4	EPA Has Not Addressed Inconsistencies in Implementing the SA Approach	11
	EPA Has Not Taken Action on Sharing Site Assessment and HRS Information	11
	Recommendations	12
	Agency Comments and OIG Evaluation	13
5	EPA Has No Communication Strategy on the SA Approach	14
	Public Information on the SA Approach Is Limited and Inconsistent	14
	Recommendations	15
	Agency Comments and OIG Evaluation	16
	Status of Recommendations and Potential Monetary Benefits	17

**EPA Needs to Take More Action in Implementing
Alternative Approaches to Superfund Cleanups**

Appendices

A	Hazard Ranking System (HRS)	18
B	Details on Scope and Methodology	19
C	The Government Performance and Results Act (GPRA) and Superfund Performance Measures	20
D	Additional Perspectives on the SA Approach	21
E	Agency Comments on Draft Report and OIG Evaluation	23
F	Distribution	38

Chapter 1

Introduction

Purpose

We sought to determine whether the U.S. Environmental Protection Agency (EPA) has created an alternative process within the Superfund program that achieves EPA's strategic objectives of cleaning up hazardous waste sites. We addressed the following questions:

- Does EPA have reliable management information (such as a published universe of sites that meet Superfund Alternative Sites (SAS) criteria and have verifiable Hazard Ranking System (HRS) scores) to measure the progress of SAS cleanups and that is easily understood by the public and other interested stakeholders? (See Chapter 2.)
- What strategic goals do SAS activities help EPA accomplish? Do SAS activities meet EPA objective 3.2.2 (cleanup and reuse contaminated land) or objective 3.2.3 (maximize Potentially Responsible Party (PRP) participation at Superfund sites), or both? Does EPA have metrics to measure progress on SAS activities? If so, what are the measures? (See Chapter 3.)
- What activities or issues did the *120-Day Study* team identify as “inconsistent” among regions using the SA approach? What is EPA doing to address these issues? (See Chapter 4.)
- Has EPA communicated to the public, participants, and other stakeholders a clear and consistent message defining the SA approach and the expected benefits of using the SA approach? (See Chapter 5.)

Background

The Comprehensive Environmental Response, Compensation, and Liability Act established the Superfund program in 1980. Superfund is the Federal Government's program to clean up the Nation's uncontrolled and/or abandoned hazardous waste sites. EPA addresses the highest priority sites by listing them on the Superfund National Priorities List (NPL). The primary method for listing sites on the NPL is with the HRS. The HRS is a screening tool that uses information from limited investigations to assess the relative potential of sites to pose a threat to human health or the environment (see Appendix A for more HRS information).

Since the 1980s, the Superfund program has been using alternative approaches to clean up hazardous waste sites that had the potential to be listed on the NPL, but were not listed. Prior to 2002, EPA called these sites NPL equivalent. In the late 1990s, or early 2000, the Agency started designating more than 200 sites as NPL equivalent in Superfund information systems. EPA first issued guidance on Superfund alternative cleanup approaches in 2002. The 2002 guidance changed the name of NPL equivalent sites to Superfund Alternative (SA) sites. EPA issued revised SAS guidance in 2004. Although EPA has not released a list of final SA sites, an April 2004 National Advisory Council for Environmental Policy and Technology (NACEPT) report indicated that 109 SA sites accounted for \$227 million in Superfund expenditures between Fiscal Years (FY) 1983 and 2003.¹

Current EPA guidance identifies several characteristics of SA sites. They include:

- Sites that meet the criteria to be listed on the NPL.
- Sites where viable and agreeable PRPs enter into enforceable agreements with EPA to perform site studies and/or cleanup work.
- Sites that are treated in accordance with the practices normally followed at NPL sites.
- Sites with agreements that contain one or more of the following provisions:
 - PRP-funded technical assistance for the community;
 - Financial assurance mechanisms to protect work continuity and assure completion of site work;
 - An agreement not to challenge NPL listing after partial cleanup; and
 - An agreement of the applicable statute of limitations for Natural Resource Damages (NRD) claims.

Over the last 3 years, multiple recommendations have been made to improve or terminate the SA approach.

- The April 2004 NACEPT report recommended that the SA approach remain a small pilot program until EPA gathered a broad range of perspectives on the value and limitations of the approach. The Council also recommended that an independent body produce, for public review and comment, a report describing the extent and performance of the SA approach and its compliance with the Comprehensive Environmental Response, Compensation, and Liability Act.

¹ NACEPT, *Final Report*, April 12, 2004. According to EPA staff, the \$227 million includes expenditures before the SAS guidance was issued and removal expenditures, which are not covered under the SAS guidance. It also includes some expenditures on non-SAS portions of sites. However, because EPA issued the first SAS guidance in June 2002, and expended \$13 million on 109 SA sites in FY 2003, FY 2003 expenditures were made during a period where guidance on SAS existed.

- An April 2004 internal EPA report (*120-Day Study*) recommended improvements in the consistency of implementing the SA approach. It also recommended that EPA prioritize SA sites along with NPL sites.²
- As reported by the Office of Management and Budget (OMB) in their 2004 Report to Congress on the Costs and Benefits of Federal Regulations, the National Association of Manufacturers (NAM) recommended that EPA terminate the SA approach.³

In response to recommendations and comments on the SA approach, the Office of Enforcement and Compliance Assurance (OECA) is now completing an internal study to define a universe of sites, evaluate outcomes and implementation of this approach, and study concerns raised by stakeholders. OSWER and OECA coauthored the relevant guidance documents and share responsibilities for implementing the SA approach. OECA helps regions with settlement negotiation issues and evaluates the SA approach. OSWER maintains EPA's database and performs the same functions for SA sites as for NPL sites. These functions include reviewing cleanup documents and performing 5-year reviews.

Scope and Methodology

We complied with the *Government Auditing Standards*, issued by the Comptroller General of the United States. We performed our fieldwork from June 2005 through July 2006. See Appendix B for additional details on Scope and Methodology.

Prior and Ongoing Reviews

We reviewed the three reports that address aspects of the implementation and effectiveness of the SA approach.⁴ We also regularly coordinated with OECA to determine progress on their ongoing internal review.

Noteworthy Achievements

In response to recommendations and comments on the SA approach, OECA is completing an internal study to define a universe of SA sites, evaluate outcomes and implementation of the SA approach, and study concerns raised by stakeholders. EPA has also recognized the need and is working to improve the SA approach to make it more transparent and consistent. During our review, some PRPs we spoke with reported on their positive experiences with the SA approach. These experiences include reduced overhead and oversight costs due to

² EPA, *Superfund: Building on the Past, Looking into the Future*, April 22, 2004. This study is also referred to as the *120-Day Study*.

³ OMB, *Progress in Regulatory Reform: 2004 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*, 2004. NAM is an organization of federally regulated companies, some of which are PRPs at Superfund sites and are potentially impacted by Superfund regulations or SAS practices.

⁴ (1) EPA, *120-Day Study*; (2) OMB, *Progress in Regulatory Reform*; and (3) NACEPT, *Final Report*.

the streamlined process, and knowledgeable and flexible EPA staff. See Appendix D for details.

Chapter 2

EPA Lacks Reliable Information on the Superfund Alternative (SA) Sites Approach

EPA lacks reliable management information because it has not managed this approach with the necessary controls required to achieve desired outcomes. Without a baseline universe of sites or consistent procedures for identifying sites in CERCLIS⁵, EPA has not been able to generally assess progress or demonstrate benefits of the SA approach. Consequently, EPA has also not been able to communicate results to the public or make informed decisions about the full merits of the approach. Without guidance on documenting “adequate” SAS hazard ranking scores, EPA does not have controls to prevent the use of potentially incorrect scoring methods. The lack of these controls can lead to waste or inappropriate use of Superfund resources, and can lead some PRPs and other stakeholders to question the SA approach.

EPA Does Not Have a Baseline Universe

Since April 2005, EPA has been attempting to determine the universe of SA sites that meets eligibility criteria. However, it has not yet finalized or released the universe. Knowing the baseline is key to determining costs of SA sites, tracking their progress, and measuring and communicating results to the public. These activities allow EPA to make informed decisions about the merits of the approach.

EPA Lacks Specific Guidance on Designating Superfund Alternative (SA) Sites in the Superfund Information System

EPA lacks specific guidance on when to designate (flag) SA sites in the Superfund information system (CERCLIS). Consequently, according to EPA’s SAS evaluation Team Leader: “...all regions handle it [designation of SA sites in CERCLIS] differently.” Lack of guidance and unilateral decisionmaking can result in designations that are inconsistent with guidance and generate poor quality data on the SAS universe. EPA’s SAS evaluation Team Leader acknowledges that flagging a SA site in CERCLIS is a “major issue.” The Team Leader is looking at this issue as part of its ongoing evaluation of the SA approach. In response to our draft report, EPA stated its evaluation report will recommend flagging specific SA agreements.

EPA Has No Guidance That Defines Criteria for “Adequate” Hazard Ranking System (HRS) Documentation

According to current SAS guidance, if it becomes necessary to propose an SA site to the NPL, EPA should have “adequate documentation” supporting an HRS score

⁵ Comprehensive Environmental Response, Compensation, and Liability Information System.

of 28.5 or higher. However, the guidance lacks definitions or criteria for “adequate.” OECA has recognized this lack as a problem. During its ongoing internal review, OECA discovered that 13 SA sites initially designated by regions do not score 28.5 or higher. OECA determined this situation was due to inconsistent regional HRS scoring methods that were not equally reliable because of the level of detail needed for some but not others. In addition, the Agency has not designated a consistent scoring method that is acceptable and reliable for designating a SA site. Consistent and reliable documentation of HRS scores at SA sites is an internal control to ensure compliance with the SAS guidance and approach.

In the recent past, some PRPs have criticized EPA for wrongly designating SA sites because they were not believed to meet the hazard ranking criteria. If EPA does not define “adequate documentation” using a consistent method to support SAS HRS scores, it does not have control over the use of potentially less reliable scoring methods. Where less reliable scoring methods are used, it can lead to waste or inappropriate use of Superfund resources. EPA cannot address transparency concerns that led to the SA approach being characterized as “subject to abuse.” It also cannot assure PRPs that SA sites rise to the level of an NPL site.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance and the Assistant Administrator for Solid Waste and Emergency Response collaborate to:

- 2-1 Publish a universe of SA sites that meets the SAS eligibility criteria and are designated SA sites and regularly update the list as the universe changes.
- 2-2 Develop specific instructions on when to use the SA designation (e.g., for sites or agreements) and update the Superfund Program Implementation Manual (SPIM) accordingly. The instructions should include provisions that state the SAS flag should not be removed even if the site is deleted, cleaned up, or proposed for the NPL, so that controls over documentation of SA sites are maintained.
- 2-3 Establish and direct Regions to use a consistent HRS scoring method that is acceptable and reliable for designating a Superfund Alternative site. At minimum, documentation on the score should be verifiable.

Agency Comments and OIG Evaluation

The OIG made changes to the report based on the Agency's comments where appropriate. Appendix E provides the full text of the Agency comments and OIG response.

The Agency partially concurred with Recommendations 2-1 and 2-2. However, the proposed actions are not acceptable because EPA did not provide details to describe how and when it will implement the recommendations. Within 90 days, the Agency needs to provide details (as described in Appendix E) on these actions as well as milestones for completing corrective actions.

The Agency disagreed with Recommendation 2-3, claiming that no actions were necessary since criteria in "40 CFR Part 300 Appendix A" were sufficient. We do not believe the Agency's position addresses the causes underlying the OIG recommendation because EPA has not implemented controls to prevent the use of potentially less reliable scoring methods by the regions. We consider the recommendation unresolved. The OIG found that regions were using various, sometimes unreliable, methods for generating HRS scores, at a time when "40 CFR Part 300 Appendix A" criteria existed. Therefore, past EPA experience indicates that simple awareness of the CFR criteria is not sufficient to ensure that regions use a reliable, acceptable, and verifiable HRS scoring method.

During its internal evaluation, OECA removed the SA designation from 13 sites that did not score 28.5 or above and determined this removal was due to inconsistent regional scoring methods. (Office of Site Remediation Enforcement (OSRE) staff told us some of the methods regions used are more reliable than others.) In response to our discussion draft, Agency staff stated that "The score (while not necessarily exact prior to a full package) is verifiable with the basic information that is fed into Quickscore, the pre-scoring tool supported by EPA OSRTI [Office of Superfund Remediation and Technology Innovation] and primarily used by EPA Regions today." Furthermore, EPA promotes the use of Quickscore for use by PRPs in response to our draft report Recommendation 4-1. Based on the Agency's comments, we revised the recommendation. Within 90 days, EPA will need to consider the revised Recommendation 2-3, provide details (as described in Appendix E) on its actions to implement the recommendation, and provide milestones for completing the actions.

Chapter 3

EPA Is Inconsistent in Measuring Results

OSWER and OECA inconsistently measure results for SA sites. OSWER tracks and reports only one of six cleanup activities or Government Performance and Results Act (GPRA) measures at SA sites that it routinely reports for NPL sites. In contrast, OECA tracks and reports all of the enforcement-related GPRA measures at SA sites that it normally does at NPL sites. EPA’s current SAS guidance states that practices followed at SA sites should generally be the same as those followed at NPL sites. Because OSWER decided not to track all cleanup measures at SA sites, it is missing opportunities to demonstrate, or determine, how SAS accomplishments contribute to Superfund strategic goals.

The Office of Solid Waste and Emergency Response (OSWER) Does Not Track and Report All Cleanup Measures at SA Sites

OSWER only measures site assessments and final assessment decisions at SA sites. OECA tracks and reports all relevant GPRA enforcement measures at SA sites. Table 3-1 shows the GPRA measures that OSWER and OECA track and report for SA and NPL sites (see Appendix C for details on GPRA and Superfund performance measures). OSWER is contemplating measuring construction completions at SA sites.

Table 3-1: GPRA Measures Tracked and Reported for NPL and SA Sites in FY 2007

Cleanup Measures (OSWER)	NPL Sites	SA Sites
Site assessments and final site assessment decisions	✓	✓
Final remedy selection	✓	
Sitewide Ready-for-Reuse (new in FY 2007)	✓	
Construction complete	✓	
Human exposure under control	✓	
Contaminated groundwater migration under control	✓	
Enforcement Measures (OECA)	NPL Sites	SA Sites
Reach settlement or take enforcement action at 95% of sites with viable, liable PRPs	✓	✓
Statute of limitations cases with unaddressed past total costs ≥ \$200,000	✓	✓

Source: EPA Office of Inspector General (OIG) analysis of EPA data.

In FY 2004, the SPIM noted the importance of tracking results at SA sites.⁶ That year, EPA added information to the SPIM about SA sites to ensure “accurate reporting of work and appropriate credit to EPA regions for cleanup of non-NPL sites [such as SA sites] as well as NPL sites.” EPA’s *120-Day Study* also encouraged program offices to track and report all cleanup progress at SA sites so that all program accomplishments can be communicated to the public and Congress.

We asked the Director of the Superfund Assessment and Remediation Division why OSWER was not measuring all Superfund results at SA sites. The Director referred us to a Superfund Team Leader who provided these reasons:

- 1) Concerns about efficiency in tracking measures at SA sites;
- 2) NACEPT concerns [NACEPT recommended EPA not integrate performance data from SA sites when reporting progress at NPL sites⁷]; and
- 3) Guidance from OMB which indicated fewer performance measures are better.

In response to these concerns, we noted the following:

- 1) EPA’s SAS evaluation leader does not expect the SA approach to become a big program. Therefore, tracking performance measures for a small number of sites would not be burdensome. In addition, OSWER does not have to implement new information systems to track performance at SA sites. It already has the ability to track and report Superfund performance measures through CERCLIS.
- 2) EPA could generate separate performance reports for NPL and SA sites.
- 3) Measuring the performance and outcomes at SA sites does not involve more measures. Rather, it involves measuring the same activities that EPA currently measures for NPL sites.

According to the OECA evaluation lead, the former Assistant Administrator for OSWER committed to tracking construction completions at SA sites. However, EPA has not updated the SPIM to indicate that regions should track and report construction completion at SA sites. As of October 16, 2006, no SA sites had achieved construction completion. By measuring and tracking all standard cleanup measures at SA sites, OSWER can demonstrate the outcomes of Superfund investments and provide an incentive to regions by more thoroughly accounting for their performance.

⁶ The SPIM provides guidance and direction on how to achieve Superfund program goals and targets.

⁷ The Superfund Team Leader told us that NACEPT recommended EPA focus on NPL sites, when in fact NACEPT stated that EPA should continue to expand its tracking system to other sites receiving Superfund dollars, and used SA sites as an example.

Recommendations

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

- 3-1 Track and report all Superfund GPRA measures at SA sites. This includes construction completions, final remedy selection, human exposure under control, migration of contaminated groundwater under control, and sitewide ready-for-reuse. Report GPRA measures at SA sites separately from GPRA measures at NPL sites.
- 3-2 Revise applicable guidance, manuals, or directives to reflect that these performance measures will be tracked and reported for SA sites.

Agency Comments and OIG Evaluation

The OIG made changes to the report based on the Agency's comments where appropriate. Appendix E provides the full text of the Agency comments and OIG response.

The Agency generally concurred with Recommendation 3-1 and offered an alternative for Recommendation 3-2, which we accept. However, EPA did not provide sufficient information to describe how and when it would implement the recommendations. Within 90 days, the Agency will need to provide details (as described in Appendix E) on these actions as well as milestones for completing the actions.

Chapter 4

EPA Has Not Addressed Inconsistencies in Implementing the SA Approach

EPA has not addressed the regional inconsistencies in implementing the SA approach raised in the Agency’s *120-Day Study*. The study reported that regions did not provide PRPs with consistent SAS criteria and transparent site assessment information. These problems contributed to perceptions and allegations from *120-Day Study* interviewees that the SA approach is “subject to abuse.” Continued inaction is likely to exacerbate concerns about EPA’s fairness and authority in implementing the SA approach. Some PRPs question EPA’s authority to request provisions in SAS. PRPs, and other stakeholders, may continue to question the SA approach until EPA implements key management controls to improve transparency.

EPA Has Not Taken Action on Sharing Site Assessment and HRS Information

OIG analysis shows that EPA’s actions to address the *120-Day Study*’s recommendation to share site assessment information have not been implemented and, at best, are in progress. However, in June 2006, EPA reported that its actions were complete. Table 4-1 shows the recommendation and EPA’s response.

Table 4-1: 120-Day Study Recommendation on SA Approach and EPA’s Response

120-Day Study Report, April 22, 2004	120-Day Study Action Plan Status, June 2006
<p>Recommendation 25: “OSWER should revise the Superfund Alternative Site policy to ensure that criteria for being a Superfund Alternative Site are uniform and that the Regions provide the PRPs and other interested parties with transparent site assessment and pre-scoring information. (Near term)”</p>	<p>“The revised SAS Guidance (signed 6/17/04) clarifies the criteria that SAS agreements and cleanups must meet, and encourages regions to discuss the SA approach with PRPs prior to the start of negotiations. The transmittal memo for the revised SAS guidance commits to improving the transparency of the SAS approach. We (OSRE/OSRTI) [Office of Site Remediation and Enforcement and the Office of Superfund Remediation and Technology Innovation] will be working with the Regions on ways to enhance the transparency of SAS designations. For example, a model general notice letter was developed to send to PRPs explaining the SA approach and the listing approach, and inviting them to participate as a SA site. We are also working on improving the quality of the SAS data in CERCLIS. In addition, the forthcoming guidance on Technical Assistance Plans (TAPs) includes ways to ensure that affected communities are adequately informed about SA site designations and opportunities for technical assistance. Status: Complete”</p>

Source: EPA, *120-Day Study*, and June 2006 Action Plan Status.

According to EPA, it issued the 2004 guidance and the January 2005 SAS general notice letter template to address Recommendation 25. However, neither of these documents addresses sharing HRS score documentation and site assessment information. The letter contains only one sentence about the eligibility criteria for SA approach: “EPA Region X believes the site qualifies for the SA approach.” In addition, the 2004 SAS guidance does not indicate how or what site assessment information is to be shared with PRPs.

In June 2006, members of NAM and the Superfund Settlements Project (SSP)⁸ told us they were unaware of any changes that addressed the concerns about the lack of transparency on SAS site assessments and HRS scores (see Appendix D for more details). Specifically, two members confirmed that EPA had not provided access to HRS scoring documents. Access to this information would have allowed the PRP to assess site conditions, their potential liability, and eligibility for SAS. Four of six SSP members did not believe their sites met the eligibility criteria for listing on the NPL. In the absence of site assessment information, they questioned whether their sites were appropriate for the SA approach. Further, NAM recommended EPA terminate the SA approach. NAM believes regions pursue site cleanups without regard to risk or a company’s accountability.

Some PRPs also raised some concerns about implementing the SA approach which they characterized as due process issues. For example, NAM members stated that the financial assurance requirements in the current guidance were more stringent than for PRPs cleaning up NPL sites. According to NAM members, the SAS community involvement requirements are greater than the NPL process. NAM members also believe the provisions not to challenge NPL listing after partial cleanup and to waive any time limitations defense for Natural Resource Damages (NRD) claims are due process rights they have to give up under the SA approach. The Agency provided documentation that it has the authority to request the SAS provisions related to NPL listing, financial assurance, community involvement, and waiver of NRD claims. In addition, the Agency’s position is that there is no requirement to have all of these provisions in a settlement agreement and that private parties are not forced to sign agreements they find unacceptable.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance and the Assistant Administrator for Solid Waste and Emergency Response collaborate, as needed, to:

- 4-1 Determine the complete list of site assessment information regions can share with PRPs during SA site negotiations.

⁸ The Superfund Settlements Project is a group of companies representing various sectors of American industry whose stated purpose is to improve the Superfund program. Some of these companies are also members of NAM.

- 4-2 Revise the SAS general notice letter to include specific details about how site assessment information should be shared with PRPs during SA site negotiations. The revisions should include the complete list of site assessment information (see recommendation 4-1).

Agency Comments and OIG Evaluation

The OIG made changes to the report based on the Agency's comments where appropriate. Appendix E provides the full text of the Agency comments and OIG response.

The Agency partially disagreed with Recommendation 4-1 by stating that it had taken action to address this recommendation. We disagreed that its action met the intent of the recommendation to increase transparency and revised the recommendation based on the Agency's response. EPA states "...Regions can provide PRPs with site assessment reports, such as the PA, SI, and ESI reports." This response indicates that *other* site assessment information can be made available to PRPs. We consider the recommendation open and unresolved. Within 90 days, EPA will need to consider the revised recommendation, provide details (as described in Appendix E) on how it will implement the recommendation, and provide milestones for completing it.

The Agency disagreed with Recommendation 4-2, but noted that it would partially implement it. The proposed action does not meet the intent of the recommendation, which we revised to be consistent with recommendation 4-1. We consider the recommendation open and unresolved. Within 90 days, EPA will need to consider the revised recommendation and provide details (as described in Appendix E) on its actions to implement recommendation 4-2 and provide milestones for completing the actions.

Chapter 5

EPA Has No Communication Strategy on the SA Approach

EPA has not developed a communication and outreach strategy to inform the public about SA sites in their communities, the benefits of the SA approach, and community involvement opportunities at SA sites. EPA did not develop this strategy because it believed its guidance was sufficient. In contrast, an abundance of communication and outreach information is available to the public on NPL sites. Of the limited public information about SA sites, some is inconsistent with Agency guidance or internal Agency information. The lack of a communication and outreach strategy to address limitations in public information and awareness of the SA approach impedes Agency transparency and public awareness. It also impedes EPA's ability to implement this cleanup process in a credible and effective manner.

Public Information on the SA Approach Is Limited and Inconsistent

EPA does not have information on its Websites, or in its guidance document, that explains how a site becomes an SA site. EPA also has not communicated the benefits of this approach or opportunities for community involvement. All of this information is available online for NPL sites. Furthermore, regional Websites contain limited information about the SA approach that is inconsistent with current guidance and internal Agency information on SA sites.

According to EPA staff, the Agency's communications tool for the SA approach is its guidance documents. However, the current guidance document does not explain how a site becomes an SA site or the value of the SA approach. In addition, the guidance does not provide site-specific details that would facilitate community involvement in the cleanup process.

The current SAS guidance does not mention any benefits of the SA approach. However, during the course of this review, OECA's Regional Support Division Director and OSWER's Assessment and Remediation Division Director proposed several benefits, including:

- 1) Cost savings: PRPs generally perform cleanup for less money than EPA. Both EPA and PRPs may incur fewer or no litigation costs. EPA and the PRPs can save the cost of listing the site on the NPL.
- 2) Resource efficiencies: EPA can use resources at other sites that do not have PRPs to fund cleanup.
- 3) More timely cleanups: Without time taken to list the site, cleanups can start sooner.⁹

⁹ EPA did not provide any plans for documenting and communicating these benefits to the public or other stakeholders.

Current SAS guidance also does not provide information on how to implement technical assistance plans for communities. The guidance calls for SAS agreements to include a Technical Assistance Plan (TAP) for communities. However, EPA has not finalized the additional guidance needed for this plan. TAPs are supposed to ensure the same type of community technical assistance opportunities at SA sites, which exist at NPL sites.

Finally, the limited online information about SA sites is incomplete or inconsistent with current guidance. NPL sites have Site Progress Profiles. These contain information on cleanup progress, site location, contamination and exposure data, and progress toward meeting GPRA goals. Although Site Progress Profiles are publicly available online for all NPL sites, they exist for only 7 of 23 sites that meet SAS eligibility criteria.

Some of the regional site information does not match internal Agency information, or is inconsistent with guidance. For example, Region 5 has a Website on Superfund Alternative Sites which includes a list of SA sites and fact sheets for each site. However, the Region's list of SA sites does not match OECA's list. Other regions have online information that is inconsistent with current guidance. Specifically, Region 4 uses the terms NPL caliber and NPL equivalent on its Website, and Region 10 uses the term NPL equivalent. These are former terms and labels for SA sites and are not consistent with the current guidance. The other seven regional Websites have no information about SA sites available.

Recommendations

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance and the Assistant Administrator for Solid Waste and Emergency Response collaborate, as needed, to:

- 5-1 Develop, and release to the public, a communication and outreach strategy, to include information on how a site becomes an SA site, the benefits of the SA approach, and SA site progress profiles.
- 5-2 Direct regions to discontinue use of terms such as NPL caliber and NPL equivalent to describe the status of SA sites, or the SA approach.
- 5-3 Finalize, and release to the public, the TAP guidance for SA sites.

Agency Comments and OIG Evaluation

The OIG made changes to the report based on the Agency's comments where appropriate. Appendix E provides the full text of the Agency comments and OIG response.

The Agency concurred with Recommendations 5-1, 5-2, and 5-3. The Agency stated that "OSWER/OECA agrees that improvements can be made in the consistency and transparency of the SA approach and plans to act on the recommendations in Chapter 5."

While the Agency agreed to implement Recommendations 5-1 and 5-2, it did not provide details on how it would implement them and when. Within 90 days, the Agency needs to provide details on its planned actions (as described in Appendix E) and milestones for completing them. The Agency's response to Recommendation 5-3 meets the intent of the recommendation, is acceptable, and we consider Recommendation 5-3 closed.

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
2-1	6	Publish a universe of SA sites that meets the SAS eligibility criteria and are designated SA sites and regularly update the list as the universe changes.	O	Assistant Administrators OECA and OSWER	Unspecified		
2-2	6	Develop specific instructions on when to use the SA designation (e.g., for sites or agreements) and update the Superfund Program Implementation Manual (SPIM) accordingly. The instructions should include provisions that state the SAS flag should not be removed even if the site is deleted, cleaned up, or proposed for the NPL, so that controls over documentation of SA sites are maintained.	U	Assistant Administrators OECA and OSWER			
2-3	6	Establish and direct Regions to use a consistent HRS scoring method that is acceptable and reliable for designating a Superfund Alternative site. At minimum, documentation should be verifiable.	U	Assistant Administrators OECA and OSWER			
3-1	10	Track and report all Superfund GPRA measures at SA sites. This includes construction completions, final remedy selection, human exposure under control, migration of contaminated groundwater under control, and sitewide ready-for-reuse. Report GPRA measures at SA sites separately from GPRA measures at NPL sites.	O	Assistant Administrator OSWER	Unspecified		
3-2	10	Revise applicable guidance, manuals, or directives to reflect that these performance measures will be tracked and reported for SA sites.	U	Assistant Administrator OSWER			
4-1	12	Determine the complete list of site assessment information regions can share with PRPs during SA site negotiations.	U	Assistant Administrators OECA and OSWER			
4-2	13	Revise the SAS general notice letter to include specific details about how site assessment information should be shared with PRPs during SA site negotiations. The revisions should include the complete list of site assessment information (see recommendation 4-1).	O	Assistant Administrators OECA and OSWER	Unspecified		
5-1	15	Develop, and release to the public, a communication and outreach strategy, to include information on how a site becomes an SA site, the benefits of the SA approach, and SA site progress profiles.	O	Assistant Administrators OECA and OSWER	Unspecified		
5-2	15	Direct regions to discontinue use of terms such as NPL caliber and NPL equivalent to describe the status of SA sites, or the SA approach.	O	Assistant Administrators OECA and OSWER	Unspecified		
5-3	15	Finalize, and release to the public, the TAP guidance for SA sites.	O	Assistant Administrators OECA and OSWER	9/30/07		

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

Hazard Ranking System (HRS)

The HRS is the scoring system used by EPA's Superfund program to assess the relative potential threat associated with the actual or potential releases of hazardous substances. The HRS is the primary screening tool for determining whether a site is to be included on the NPL. The HRS score for a site is determined by evaluating four pathways of potential human exposure:

- Ground water migration (drinking water);
- Surface water migration (drinking water, human food chain, and environmental);
- Soil exposure (resident population and nearby population); and
- Air migration (population, sensitive environments).

Any site scoring 28.5 or above is eligible for the NPL. All information used in scoring must be recorded in the HRS documentation record. The documentation record is the central element of the HRS package, and contains all of the information upon which a site score is based. For sites proposed to the NPL, the documentation record and references are available for public review. All HRS scoring packages developed by States and EPA contractors are subject to quality control review by EPA regional site assessment staff. After regional quality control is complete, packages undergo an in-depth quality assurance review at EPA Headquarters. EPA Headquarters does not require HRS scoring packages for SA sites, unless the site is proposed to the NPL.

Details on Scope and Methodology

In answering our questions, we reviewed EPA's 2002 and 2004 SAS guidance, EPA's Superfund Program Implementation Manual (SPIM) for FY 2002 through FY 2007, EPA's *120-Day Study*, and the NACEPT and OMB reports. We supplemented our review of documents by interviewing Superfund program managers and staff. Additional and specific steps we took to review internal controls and answer each question follow.

To determine how SA sites contribute to EPA's strategic goals, we reviewed the requirements of the Government Performance and Results Act (GPRA) of 1993, EPA's strategic plans, and annual performance plans and reports (see Appendix C).

To determine how EPA has communicated the SA approach to the public, participants and other stakeholders, we reviewed EPA's methods for communicating how the SAS process works and how cleanups at SA sites are progressing. We examined EPA's Superfund Websites, including the Superfund Community Involvement Toolkit, regional Websites, and Site Progress Profiles. We compared how EPA communicates the SA approach to its public communications and information on the NPL process.

We obtained interviews and testimonial evidence from OECA and OSWER staff and representatives of NAM, Superfund Settlements Project (SSP) and other PRPs that had experience with the SA approach. Because feedback from NACEPT, NAM, and EPA's *120-Day Study* was generally negative, we asked EPA if it was aware of any PRPs that had positive experiences. EPA provided us with PRP contacts it thought viewed the SA approach positively. We sent a short questionnaire to seven PRPs to assess their general views and experiences with the SA approach (see Appendix D). We selected the seven PRPs because they were associated with currently designated SA sites; EPA had not contacted them during the course of their internal evaluation; and they were not members of SSP, who had already provided us feedback.

To determine what the *120-Day Study* authors found inconsistent about the SA approach, we queried the study leader (the Deputy Assistant Director for EPA's Office of Air and Radiation). Because the study leader did not have several of the records needed, where possible, we went directly to the sources of the study's findings, including the Director and staff of the Emergency and Remedial Response Division in Region 2, and Director and staff of the Superfund Division in Region 9 (to determine why these regions do not use the SA approach) and representatives of NAM and SSP (to obtain information about EPA's practices in sharing site assessment and HRS information).

To determine whether EPA has reliable management information on the SA approach, we considered and reviewed information and documents gathered in answering our previous questions on how EPA communicates and determines the benefits of the SA approach. We reviewed OECA's analysis and progress in identifying a universe of SA sites.

The Government Performance and Results Act (GPRA) and Superfund Performance Measures

GPRA requires Federal agencies to prepare performance plans with annual performance goals and measures to help move them toward managing for results. Performance measurement is the monitoring and reporting of program accomplishments, particularly progress toward pre-established goals. Performance measures address the type of program activities conducted, the direct products and services delivered by a program (outputs), and the results of those products and services (outcomes). Effective performance measurement enables an agency to establish baselines; identify and prioritize problems; and evaluate, manage, and improve programs. To meet GPRA requirements, EPA's strategic plan outlines the Agency's five long-term goals and guides in establishing the annual goals that EPA must meet along the way. To fulfill its five strategic goals, the plan includes a series of more specific objectives and sub-objectives. Each of the objectives has performance measures designed to demonstrate progress in achieving the objective and, eventually, the strategic goal.

In EPA's current *2006—2011 Strategic Plan*, the Superfund program is under Goal 3, Land Preservation and Restoration. Under Goal 3, "By 2011, [EPA will] control the risks to human health and the environment by mitigating the impact of accidental or intentional releases by cleaning up and restoring contaminated sites or properties to appropriate levels." Specific Superfund activities are under Objective 3.2: Restore Land. This objective includes three sub-objectives: (1) prepare for and respond to releases, (2) clean up and reuse land, and (3) maximize PRP participation at Superfund sites. In FY 2007, the Superfund cleanup program is measuring its progress on these sub-objectives through six strategic targets:

- Performing site assessments and making final assessment decisions;
- Selecting final remedies designed to clean up contamination to risk levels that protect human health and the environment and are appropriate for anticipated future land use;
- Completing construction of selected remedies;
- Protecting the public from the health effects of exposure to contamination;
- Controlling the migration of contaminated groundwater; and
- Achieving the designation "Sitewide Ready for Reuse" at construction complete NPL sites.

In FY 2007, the Superfund enforcement program is measuring its progress by applying the Enforcement First strategy and by recovering costs. Specifically, EPA will:

- Reach a settlement or take an enforcement action before the start of a remedial action at 95 percent of Superfund sites having viable, liable responsible parties; and
- Address all statute of limitations cases for Superfund sites with unaddressed total past costs equal to or greater than \$200,000.

Additional Perspectives on the SA Approach

During our evaluation, we met with members of the National Association of Manufacturers (NAM) and the Superfund Settlements Project (SSP) and surveyed seven other PRPs to gather additional perspectives on the SA approach. Most of the feedback from NAM and SSP was negative. Therefore, we asked EPA to provide us with PRPs it thought viewed the SA approach positively. We surveyed seven of these PRPs. The following is a summary of information gathered from the seven PRPs we surveyed, and of information provided by NAM and SSP members.

OIG Survey of PRPs

We sent a short questionnaire to seven PRPs to obtain their general views and experiences with the SA approach. Six of the seven PRPs provided responses to our questionnaire. Four of six PRPs stated that they had generally positive overall experiences with the SA approach. Some of the key reasons that PRPs had positive experiences were:

- Overhead and oversight costs were reduced because the SA approach was streamlined.
- EPA staff were professional, reasonable, knowledgeable, and flexible.
- The region has more decisionmaking authority during the SA approach than during the NPL process.

However, some PRPs made suggestions regarding the SA approach:

- Regions need maximum flexibility to facilitate timely remediation and the SA approach needs more streamlining.
- EPA needs to reduce document review time and oversight.
- EPA needs to reduce negotiation time.
- EPA needs to be more cooperative when deciding deadlines and goals with PRPs.

NAM and SSP Perspectives

We interviewed NAM members after we became aware of their recommendation to OMB to terminate the SA approach. NAM believed the SAS guidance encourages regional offices to evade the requirements of the NPL and to clean up sites without regard to risk or PRP accountability for the site. Members of SSP were also present during our interviews with NAM; some SSP members are NAM members. We posed followup questions to SSP about concerns we heard during our interviews, to determine whether EPA had responded to their concerns. Below we summarize the key concerns.

- Some PRPs criticized and challenged EPA for not sharing site assessment or HRS scoring information with participants; and

- Some PRPs believed due process rights are compromised because SA site cleanups can involve different requirements, and in some cases more stringent requirements, than cleanups conducted under the NPL process.

As discussed in Chapter 4, we did not find evidence that EPA has directly and effectively addressed these concerns. Furthermore, a 2004 Supreme Court ruling (*Cooper Industries, Inc. v. Aviall Services Inc.*) has left some PRPs questioning their ability to seek cost recovery from other liable parties for voluntarily conducted cleanups, such as those EPA conducts under its SA approach.

Agency Comments on Draft Report and OIG Evaluation

MEMORANDUM

SUBJECT: Comments on the Office of Inspector General's March 19, 2007 Draft Evaluation Report, "EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups"

FROM: Granta Y. Nakayama, Assistant Administrator
Office of Enforcement Compliance Assurance (OECA)

Susan P. Bodine, Assistant Administrator
Office of Solid Waste and Emergency Response (OSWER)

TO: Carolyn Copper, Director for Program Evaluation
Hazardous Waste Issues
Office of Inspector General (OIG)

On March 19, 2007, OECA and OSWER received OIG's draft evaluation report, "EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups." As you know, OECA's Office of Site Remediation Enforcement (OSRE) and OSWER's Office of Superfund Remediation and Technology Innovation (OSRTI) jointly developed the relevant guidance documents¹⁰ on the Superfund Alternative approach and have overseen its implementation.

OSWER/OECA offers three categories of comments on the draft report: (1) general comments and major concerns (below); (2) specific comments to report recommendations (see Attachment 1, with a Supplemental Response on Recommendation 4-3); and (3) detailed comments on the draft report that are not specifically tied to particular draft recommendations (see Attachment 2).

¹⁰ June 24, 2002, "Response Selection and Settlement Approach for Superfund Alternative Sites" (SAS Guidance); June 17, 2004, "Revised Response Selection and Settlement Approach for Superfund Alternative Sites" (Revised SAS Guidance).

GENERAL COMMENTS

- We concur with some of OIG’s proposed recommendations and, as specified in the attached chart, have initiated or planned corrective actions as part of our own evaluation of the SA approach.
- Notably, OSWER/OECA agrees that continued integration of accurate SA approach data and outcomes into current Superfund systems is appropriate. OSWER/OECA will weigh the pros and cons and the difficulty/resource intensiveness of tracking all GPRA measures at sites following the SA approach (Recommendations 2-1, 2-2).
- OSWER/OECA also agrees that improvements can be made in the consistency and transparency of the SA approach and plans to act on the recommendations in Chapter 5.

MAJOR CONCERNS

- The draft report states that “OECA is the lead on the SAS approach, and [OSWER] provides support,” and, repeatedly through the report, suggests that OECA is the lead on the SA approach. As stated above, OSWER and OECA co-authored the relevant guidance documents and share responsibilities for implementing the SA approach. We ask that this partnership be reflected accurately in the OIG evaluation report.

OIG response:

Prior to receiving the Agency’s April 16, 2007 response, OSRE staff told us that, “OSRE is considered the lead on the SAS initiative with support from OSRTI.” However, we have revised the final report based on the official, and current Agency view that, OECA and OSWER share duties in implementing the SA approach.

- With Recommendation 4-3, OIG recommends that the SAS guidance and general notice letter be revised to include language from an EPA legal opinion stating EPA’s legal authority to request certain provisions in SA agreements and that no due process violations are associated with these provisions. OSWER/OECA disagrees with OIG’s recommendation. OECA developed the model language and documents (including the four SA provisions) with the advice of the Office of General Counsel (OGC) and in consultation with the U.S. Department of Justice (DOJ). OGC has reviewed OIG’s draft report, and continues to believe that EPA has the legal authority to enter into agreements that include the SA provisions and that negotiating and entering such agreements does not deprive potentially responsible parties (PRPs) of due process. In these circumstances, we do not think it is appropriate to suggest that there are doubts about legal authority or due process by amending the guidance to specifically deny that EPA lacks legal authority or has denied PRPs due process.

OIG response:

We removed this recommendation from the final report because the Agency provided documentation on its authority to include the provisions.

If you have questions about OSWER/OECA's response, please contact Ken Patterson in OSRE or Elizabeth Southerland in OSRTI. We look forward to continuing the discussion of your draft report with you.

Attachments

cc:

Barry Breen, OSWER
Lynn Buhl, OECA
Mary Kay Lynch, OGC
Earl Salo, OGC
Susan Bromm, OSRE
James Woolford, OSRTI

ATTACHMENT 1

EPA/OIG Evaluation Draft Report: EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups (3/19/07)

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
2-1	Finalize and release a universe of SA sites that meets the SAS eligibility criteria.	<u>OSWER/OECA agrees with this recommendation, with a clarification.</u> The SA universe is dynamic and any data or list of sites following the SA approach is just a snapshot. OSWER/OECA’s own internal evaluation of the SA approach closely examined available data on sites flagged in CERCLIS as SA. Our evaluation report – now in the final stages of review – will identify the number of sites actively using the SA approach (i.e., non-NPL sites with an agreement for RI/FS, RD, RA, or NTCRA finalized after the June 2002 SAS Guidance was issued). Sites where the SA approach is being used may also have other approaches being used concurrently. OSWER/OECA will consider including this information in end-of-year reports.	<p>Agency partially agrees but does not commit to implementation; no milestone dates provided.</p> <p>The OIG is aware that the SA universe is “dynamic.” However, EPA has not committed to releasing site-specific information for each SA site (beyond a number total) nor provided milestone dates. That is the intent of the recommendation. We have revised the final recommendation accordingly.</p> <p>For the OIG to close this recommendation, in its response to the final report, EPA will need to:</p> <p>(1) Consider the revised recommendation.</p> <p>(2) Describe completed or planned actions to release site-specific information on all sites that meet the SA criteria, at that time. The site-specific information should include, as applicable, the same categories and fields of information contained in publicly accessible Superfund Site Progress Profiles.</p> <p>(3) Provide milestone dates for completion.</p>
2-2	Develop and issue guidance for when to flag SA sites in CERCLIS. For final SA sites, the guidance should include provisions that state the SAS flag should not be removed even if the site is deleted, cleaned up, or proposed for the NPL, so that controls over	<u>OSWER/OECA agrees in part, and disagrees in part, with this recommendation.</u> OSWER/OECA disagrees with OIG’s implicit suggestion that there is no current guidance for when to flag SA sites in CERCLIS. The Superfund Program Implementation Manual	<p>Agency partially agrees and partially disagrees; no milestone dates provided.</p> <p>The changes made to the SPIM for FY 08/09, which is not effective until October 1, 2007, do not address the timing of the SA designation. We revised our final recommendation to ensure that the Agency updates the</p>

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
	documentation of SAS are maintained.	<p>(SPIM) currently provides guidance for when to flag in CERCLIS sites using the SA approach. As appropriate, OSWER/OECA will update the SPIM when our internal SA evaluation is finalized. (For example, our evaluation report will recommend flagging specific SA agreements.)</p> <p>OSWER/OECA agrees with OIG that once the SA approach is used at a site (that is, EPA has entered an enforceable SA agreement with a potentially responsible party (PRP)), the SA flag (or an equivalent indicator) attached to that agreement should remain even if the site ultimately is cleaned up under an approach other than SA (e.g., the site is later listed on the NPL).</p>	<p>SPIM to address the timing of the SA designation.</p> <p>EPA indicated its upcoming evaluation report will recommend flagging specific SA agreements and we revised the report to reflect this. We revised the final report to reflect that EPA’s guidance on SA sites does not include specific information on when to designate a site or agreement as SA.</p> <p>For the OIG to close this recommendation, in its response to the final report, EPA will need to:</p> <ol style="list-style-type: none"> (1) Consider the revised recommendation. (2) Describe completed or planned actions to define the point in time and the criteria that need to be met for the SAS flag to be inserted in EPA’s Superfund Information System, i.e., when an agreement consistent with SAS guidance is signed. (3) Provide milestone dates for completion.
2-3	Identify and communicate to the regions which of the HRS scoring methods are acceptable and reliable for designating a Superfund Alternative site, e.g. Quickscore. At minimum, the documentation should be verifiable.	<p><u>OSWER/OECA disagrees with this recommendation because we have already accomplished this.</u></p> <p>The Regions are responsible for ensuring the score is greater than or equal to 28.5 for a site being considered for the SA approach. OSWER has queried the Regions about how they score sites when deciding to use the SA approach at a particular site and how they document the scoring process for future references and verification. The Regions use the same scoring process to score sites using the SA approach as they use to prepare an HRS package for listing a site on the NPL – the HRS scoring process (and tools that facilitate this process). These requirements are described in 40</p>	<p>Agency disagrees and will not implement.</p> <p>EPA has not implemented controls to prevent the use of potentially less reliable scoring methods by the regions. During its internal evaluation, OECA removed the SA designation from 13 sites that did not score 28.5 or above and determined the removal was due to inconsistent regional scoring methods. (OSRE staff told us some of the methods regions used are more reliable than others.) According to the Agency’s guidance documents, these sites were to be “NPL equivalent” or were to score 28.5.</p> <p>In response to our discussion draft, Agency staff stated that “The score (while not necessarily exact prior to a</p>

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
		<p>CFR Part 300 Appendix A. In addition, 40 CFR Part 300 Appendix A provides a set of score sheets to assist in appropriate site scoring.</p>	<p>full package) is verifiable with the basic information that is fed into Quickscore, the pre-scoring tool supported by EPA OSRTI and primarily used by EPA regions today.” Furthermore, EPA promotes the use of Quickscore for use by PRPs in response to recommendation 4-1. We revised the recommendation to read “Establish and direct regions to use a consistent HRS scoring method that is acceptable and reliable for designating a Superfund Alternative site. At minimum, documentation on the score should be verifiable.”</p> <p>For the OIG to close this recommendation, in its response to the final report, EPA will need to:</p> <ol style="list-style-type: none"> (1) Consider the revised recommendation. (2) Describe completed or planned actions to specify a consistent scoring method with verifiable documentation that will result in regional HRS scores that are acceptable and reliable for designating a SA site. The method should be the same as that which can be used by PRPs to verify HRS scores. (3) Provide milestone dates for completion.
3-1	<p>Track and report all Superfund GPRA measures at SA sites. This includes construction completions, final remedy selection, human exposure under control, and site-wide ready-for-reuse. Report GPRA measures at SA sites separately from GPRA measures at NPL sites.</p>	<p><u>OSWER/OECA generally agrees with this recommendation, with certain clarifications.</u> Currently, the only Superfund GPRA measure that includes sites with SA agreements is the measure for Final Assessment Decisions (FADs). (Note that “final remedy selection” is no longer a GPRA measure.) The current GPRA measures that do not include SA sites are “Human Health Under Control,” “Ground Water Migration Under Control,” “Sitewide Ready for Anticipated Use,” and “Construction Completions.” On an operable</p>	<p>Agency generally agrees but does not commit to implementation; no milestone dates provided.</p> <p>The Agency is incorrect that “final remedy selection is no longer a GPRA measure.” The SPIM for FY 06/07 (dated November 6, 2006, Appendix G, page G-2) states:</p> <p>“In FY 2007, the Superfund Remedial Program will measure its progress in achieving environmental results through six key strategic targets. These six strategic targets include: (1) performing site assessments and making final assessment decisions, (2) <i>selecting final</i></p>

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
		<p>unit (OU) basis, information on SA sites is gathered as part of a new, larger “Ready for Anticipated Use (RAU)” measure that is not a GPRA measure.</p> <p>OSWER will examine the pros and cons and the difficulty/resource intensiveness of tracking SA sites under additional GPRA measures. Such tracking may become easier once OSWER/OECA issues its evaluation report and clarifies expectations for flagging SA agreements in CERCLIS.</p> <p>In the meantime, OECA will continue tracking and reporting GPRA enforcement measures at sites using the SA approach, and OSWER/OECA also can track and report GPRA measures at sites with SA agreements using an ad-hoc, end-of-the-year report.</p>	<p><i>remedies designed to clean up contamination to risk levels that are protective of human health and the environment and appropriate for reasonably anticipated future land use,</i> (3) completing construction of the selected remedies, (4) protecting the public from the health effects of exposure to contamination, (5) controlling the migration of contaminated groundwater, and (6) achieving the designation “Sitewide Ready for Reuse” at construction complete NPL sites. Each strategic target represents an important milestone in achieving risk reduction; no one measure can itself adequately capture the total environmental benefits derived from the Superfund program. Strategic targets (1) and (3), above, have been in place for several years. <i>Strategic target (2) was implemented for the first time in FY 2004 and will be phased out beginning in FY 2008. Strategic target (6) is new for FY 2007.” [emphasis added]</i></p> <p>The SPIM can be found at http://www.epa.gov/superfund/action/process/spim06.htm .</p> <p>In its response, EPA has not committed to tracking and reporting all Superfund GPRA measures at SA sites. For OIG to close this recommendation, in its response to the final report, EPA will need to (1) Reconsider the recommendation and (2) Provide specific planned actions and milestone dates for completion.</p>
3-2	Revise applicable guidance, manuals, or directives to reflect that these performance measures will be tracked and reported for SA sites.	<p><u>OSWER/OECA disagrees with this recommendation but suggests an alternate action.</u> As appropriate, OSWER/OECA will consider the need to revise applicable guidance, manuals, or directives once our own SA evaluation is complete. The</p>	<p>Agency disagrees but offers to study alternatives with no commitment to implement; no milestone dates provided.</p> <p>When EPA implements GPRA measures for SA sites (i.e., OIG recommendation 3-1), it will have to</p>

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
		<p>Superfund Program Implementation Manual (SPIM) currently provides guidance for when to flag in CERCLIS sites using the SA approach. As appropriate, OSWER/OECA will update the SPIM when our internal SA evaluation is finalized. At this time, OSWER/OECA does not see a need to update other documents.</p> <p>OSWER/OECA also will consider the most appropriate way to educate Regions on the necessary data input for sites with SA agreements so that these sites can be tracked in the ad hoc, end-of-year report described in our response to draft Recommendation 3-1.</p>	<p>update some Agency guidance and manuals to reflect new tracking measures. Therefore, for the OIG to close this recommendation, in its response to the final report, EPA will need to (1) Reconsider the recommendation and (2) Provide specific planned actions and milestone dates for completion.</p>
4-1	<p>Determine what site assessment and SAS HRS scores regions can share with PRPs during SA site negotiations.</p>	<p><u>OSWER/OECA disagrees with this recommendation because the end goal of the recommendation has been accomplished.</u> The Regions can, and do provide appropriate site information to PRPs.</p> <p>At sites proposed to the NPL, but currently using the SA approach, EPA Regions provide HRS scores, and PRPs can obtain HRS documentation from the EPA docket.</p> <p>Prior to proposing a site to the NPL, HRS scores are pre-decisional and, therefore, consistent with EPA policy, not releasable. Therefore, at sites using the SA approach that have not been proposed to the NPL, Regions can provide PRPs with site assessment reports, such as the PA, SI, and ESI reports. Data from these reports can be input</p>	<p>Agency partially disagrees, recommendation revised.</p> <p>We recognize EPA’s policy that HRS scores are pre-decisional and not releasable. However, EPA states “...Regions can provide PRPs with site assessment reports, such as the PA, SI, and ESI reports.” This response indicates that <i>other</i> site assessment information can be made available to PRPs. We have revised the recommendation based on this response.</p> <p>For the OIG to close this recommendation, in its response to the final report, EPA will need to (1) Consider the revised recommendation and (2) Provide specific planned actions and milestone dates for completion.</p>

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
		into "Quick Score" (developed by EPA and available on the internet) to calculate a preliminary HRS score.	
4-2	Revise the SAS guidance and SAS general notice letter, as appropriate, to include specific details about how site assessment information should be shared with PRPs during SA site negotiations.	<p><u>OSWER/OECA generally agrees with this recommendation.</u> OSWER/OECA is committed to developing ways to improve the transparency of the SA approach and will revise the sample general notice letter to include more specific information about site assessment information.</p> <p>OSWER/OECA's forthcoming evaluation report will clarify that, at sites using the SA approach, Regions can provide PRPs with site assessment reports, such as the PA, SI, and ESI reports. (As discussed above in reference to Recommendation 4-1, a PRP can calculate the HRS score for a site using data from these reports.) Moreover, OSWER/OECA intends to continue educating EPA Regions about implementation of the SA approach, including appropriate communications with PRPs.</p>	<p>Agency partially agrees to implement recommendation; no milestone dates provided.</p> <p>EPA has agreed to implement the recommendation by revising the sample general notice letter. Because the sample general notice letter is a companion to the current SAS guidance, we removed the recommendation to revise the SAS guidance. In order to increase transparency of the SA approach, we also revised the recommendation to require that the general notice letter include references to the complete list of site assessment information PRPs can have.</p> <p>For the OIG to close this recommendation, in its response to the final report, EPA will need to provide specific planned actions and milestone dates for completion.</p>
4-3	Revise the SAS guidance and the SAS special notice letter, as appropriate, to include language from an EPA legal opinion that states EPA has the authority to include each of the four provisions (community involvement, financial assurance, NRD claims, and NPL listing) in SAS agreements. The opinion should include a statement that no due process violations are associated with these provisions.	<u>OSWER/OECA disagrees with this recommendation.</u> See Supplemental Response.	See response below.

Rec #	EPA/OIG Recommendation	OSWER/OECA Response to Recommendation	OIG Response
5-1	Develop, and release to the public, a communication and outreach strategy, to include information on how a site becomes an SA site, the benefits of the SAS approach, and SA site progress profiles.	<u>OSWER/OECA generally agrees with this recommendation.</u> OSWER/OECA is committed to improving the transparency of the SA approach and is already developing communication tools to share such information with stakeholders. We will consider the need to develop a communication and outreach strategy, or other public education documents or methods, specific to the SA approach.	Agency agrees, but does not commit to implement; no milestone dates provided. EPA did not commit to implementing the recommendation. For the OIG to close this recommendation, in its response to the final report, EPA will need to reconsider the recommendation, which includes agreement to do the following: (1) Preparing and releasing to the public, SA site progress profiles. (2) A public explanation of the benefits of the SA approach. (3) Information on how a site becomes an SA site. (4) Provide milestone dates for completion.
5-2	Direct regions to discontinue the use of terms such as NPL caliber and NPL equivalent to describe the status of SA sites, or the SAS approach.	<u>OSWER/OECA agrees with this recommendation to use consistent terminology.</u> As we understand OIG’s concern, some Regions refer to sites following the SA approach as “NPL caliber” or “NPL equivalent.” OSWER/OECA agrees to address this issue as part of its efforts to improve consistency and transparency. As described above in our comment on Recommendation 4-2, OSWER/OECA intends to continue educating EPA Regions about implementation of the SA approach, including appropriate communications with PRPs.	Agency agrees, but did not provide specific actions or milestone dates for implementation. For the OIG to close this recommendation, in its response to the final report, EPA will need to (1) Reconsider the recommendation and (2) Provide specific planned actions on how it will “educate Regions” and provide milestone dates for completion.
5-3	Finalize, and release to the public, the TAP guidance for SA sites (as appropriate, after OSWER and OECA address recommendation 4-3).	<u>OSWER/OECA agrees with this recommendation.</u> We anticipate issuing this guidance by the end of this fiscal year.	Agency agrees and provided a milestone date.

SUPPLEMENTAL RESPONSE ON RECOMMENDATION 4-3

OIG 3/19/07 Draft Recommendation 4-3: *Revise the SAS guidance and the SAS general notice letter, as appropriate, to include language from an EPA legal opinion that states EPA has the authority to include each of the four provisions (community involvement, financial assurance, NRD claims, and NPL listing) in SAS agreements. The opinion should include a statement that no due process violations are associated with these provisions.*

OSWER/OECA disagrees with this recommendation.

EPA's principal authority for administrative agreements and consent decrees is CERCLA §122, which gives EPA very broad authority to enter into settlements that are in the public interest. OECA has developed model language and documents (including the four SA provisions) with the advice of Office of General Counsel (OGC) and in consultation with the U.S. Department of Justice (DOJ). This process with OGC and DOJ is intended to assure that the actions proposed in the guidance are within our legal authority. OGC has reviewed OIG's draft report, and continues to advise us that EPA has the legal authority to enter into agreements that include the SA provisions and that negotiating and entering such agreements does not deprive potentially responsible parties (PRPs) of due process. In these circumstances, we do not think it is appropriate to suggest that there are doubts about legal authority or due process, by amending the guidance.

When EPA has PRPs clean up sites, it starts negotiations using standardized model agreements to help ensure that public health and the environment are protected. OGC and DOJ review and concur on the model language and documents. As discussed in the 2004 Revised SAS Guidance, the four model SA provisions are narrowly drawn and intended to put EPA, the community, and natural resource trustees in equivalent positions to their positions at NPL sites.

Following is an explanation of each SA provision and how it ensures equivalent protections for sites using the SA approach as for sites listed on the NPL.

- **Technical Assistance Plan (TAP) provision.** At sites proposed to or listed on the NPL, Technical Assistance Grants (TAGs) are available to qualified community groups to allow them access to independent technical assistance. Generally, TAG funds are used by the community groups to hire a technical advisor who can then help them understand the cleanup at the site. The TAP provision in SA agreements gives community groups the same opportunity to have independent technical assistance. Because TAGs are not awarded at every NPL site, the model TAP provision is contingent on demonstrated community interest, and the PRP has no TAP responsibilities until a qualified community group comes forward. This provision can be omitted if the site is already proposed for listing on the NPL or if an alternative source of independent technical assistance is available to the community.
- **Financial Assurance.** EPA requests that PRPs agree to provide financial assurance in consent decrees at NPL-sites and at sites using the SA approach for the estimated costs of the RA. Because of limitations on accessing the Trust Fund at sites not listed on the NPL, Regions request that PRPs provide some amount of that financial assurance through a liquid instrument(s). Generally, the amount of liquid financial assurance should be

equal to the costs that would be needed to keep cleanup work going through the listing process. The SA financial assurance provision does not ask for any *additional* financial assurance – it asks for a part of the standard financial assurance to be established in an immediately accessible form.

- “Agreement not to challenge listing” provision. This provision puts EPA in the same position as if the site has been proposed to the NPL, as the site would be proposed based on conditions prior to the PRPs beginning work. With this provision, PRPs agree not to challenge the listing of the site based on changed site conditions due to partial cleanup. This puts EPA in an equivalent position to a site already listed on the NPL if a PRP does just enough work so that the site will no longer score high enough for listing, and then stops work. In that scenario, a PRP that has agreed to this provision cannot challenge EPA’s listing the site on the NPL based on having performed a partial cleanup. This provision is quite narrowly drawn; a PRP retains their right to challenge the listing on other grounds. This provision is not needed at sites already proposed for listing on the NPL.
- Natural Resources Damages provision. This provision protects Federal Trustee interests to the same degree these interests are protected at NPL sites. The provision clarifies that the applicable statute of limitations is CERCLA Section 113(g)(1), which is the applicable statute of limitations for NPL sites or facilities at which an RA is scheduled. EPA anticipates an RA will be performed at sites using the SA approach. This provision can be omitted when DOJ agrees (on behalf of the trustees) that there are no natural resource damage issues at stake at a site.

The SA approach is appropriate at sites where PRPs are able and willing to perform the necessary cleanup. PRPs may choose not to enter into any agreement with EPA if they do not like the terms of the agreement. Just as with other settlement negotiations, PRPs can assert that a provision is not necessary or appropriate for a specific site. As set forth in the Revised SAS Guidance, EPA regions may omit or modify SA provisions with approval from OSWER/OECA and/or DOJ. Indeed, OSWER/OECA has approved such requests from EPA regions when omission or revision of the SA provisions is appropriate based on specific site circumstances.

Notably, similar negotiation issues arise at many Superfund sites, not just those using the SA approach. In settlement negotiations, all parties have the ability to make their needs known and understood and to elect to accept or reject the stated needs of the other parties. Negotiating parties may decide it is in their best interest to accept a provision that they do not like in order to reach settlement; this situation occurs on both sides of the table. Ultimately, EPA cannot force negotiating parties to sign a settlement agreement.

OIG response:

We removed this recommendation from the final report because the Agency provided documentation on its authority to include the provisions.

ATTACHMENT 2

OIG Evaluation Draft Report: EPA Needs to Take More Action in Implementing Alternative Approaches to Superfund Cleanups (3/19/07)

Detailed Comments Not Tied to Particular Recommendations

At a Glance

- OSWER/OECA typically references the “SA approach” rather than the “SAS approach.” We feel this distinction recognizes that use of the SA approach may not define a site; there may be more than one approach being used at a site.
- Here, and in other places in the draft report, OIG discusses the need to “finalize the universe of [SA] sites.” We suggest that more accurate wording would either be to “finalize the criteria for flagging in CERCLIS a site using the SA approach.” The SA “universe” will be dynamic.

OIG response:

The OIG is aware that the universe may be dynamic. The issue of flagging sites in CERCLIS is different than EPA deciding and finally releasing the list of “dynamic” SA sites. No change made to report.

- We recognize that OIG has spoken with external parties recently about their views on the SA approach. However, references to comments made by internal and external parties in 2004 (e.g., the 120 Day Study, the NACEPT Subcommittee report) no longer seem “recent” to us.

OIG response:

The OIG disagrees. Within the last year, many of the same concerns external parties made during the *120-Day Study* were also communicated to us. We are unaware that the external parties have rescinded their prior comments. No changes made to report.

- In the sidebar and under the heading “What We Found,” OIG characterizes external parties as “report[ing] problems” with the SA approach. OSWER/OECA suggests it would be more accurate to say that the external parties “raised questions or concerns.”

Chapter 1

- The SA approach is used at sites where PRPs are viable and *willing* to enter into agreements. (See second bullet on page 2.)

OIG response:

Report revised to include: “viable and agreeable PRPs” as the 2004 Revised SAS guidance indicates.

- There is no one type of agreement that would include all four SA provisions. Therefore, it may be more accurate to say “agreements that contain *one or more of the following* provisions.” (See fourth bullet on page 2.)

OIG response:

Report revised to state “Sites with agreements that contain one or more of the following provisions.”

- In describing the Natural Resource Damages (NRD) provision, it may be more accurate to say “*an agreement of the applicable* statute of limitations” for NRD claims.

OIG response:

Report revised to state “An agreement of the applicable statute of limitations for Natural Resource Damages (NRD) claims.”

- In the first full paragraph on page 3, and throughout the report, OIG refers to OECA as the lead on the SA approach, with OSWER providing support. As noted in our general comments, OSRE and OSRTI share responsibilities for implementing the SA approach and ask that this partnership be accurately reflected.

Chapter 2

- We appreciate that OIG now generally refers to the SA “approach” rather than “program.” However, in several places, OIG still suggests that the SA “program” is not being managed appropriately. The SA approach is not a program, just one alternative available for cleaning up a Superfund site.

OIG response:

The OIG acknowledges the Agency’s position. However, by considering these activities as a program better ensures that the Agency will implement appropriate management controls to protect against fraud waste and abuse. We revised the sentence to read “EPA lacks reliable management information because it has not managed this approach with the necessary controls required to achieve desired outcomes.”

- On page 4, OIG states that “[d]uring its internal review, OECA discovered that *many* SA sites initially designated by regions do not score 28.5 or higher.” OSWER/OECA believes that this statement needs additional context to be accurate. As you know, our internal review included a QA/QC of CERCLIS data on sites following the SA approach. We found that there were a number of sites where the SA flag should be removed. There were many reasons why these sites should not be flagged “SA”: some were proposed for

listing on the NPL and not following the SA approach; some were going to be addressed by the state; some were removal-only sites; and some did not score 28.5 or higher.

OIG response:

We made no change to the report. This statement refers to 13 sites EPA initially designated as SA sites that were later removed from the list of SA sites because they did not score 28.5 or higher. We recognize there are other reasons that EPA removed the SA designation from other sites, but this comment is not relevant to the discussion in Chapter 2.

Chapter 3

- Table 3-1 needs to be updated to reflect current GPRA measures. For example, “Final Remedy Selection” is no longer an OSWER GPRA measure.

Chapter 4

- The OIG references feedback from its discussions with NAM. We request that the report reflect that NAM has not met with OSWER/OECA on this topic.

Appendix D

- OSWER/OECA appreciates the effort to include more detail about its discussions with external parties and asks OIG to consider moving some or all of this discussion into Chapter 4 because it reflects some positive feedback on the SA approach from external parties.
- OSWER/OECA suggests OIG remove the last sentence referencing the Supreme Court ruling in *Cooper Industries, Inc. v. Aviall Services, Inc.* Aviall-related issues are not unique to sites using the SA approach.

Distribution

Office of the Administrator
Assistant Administrator, OSWER
Assistant Administrator, OECA
Principal Deputy Assistant Administrator, OSWER
Principal Deputy Assistant Administrator, OECA
Deputy Assistant Administrator, OECA
Agency Followup Official (the CFO)
Agency Followup Coordinator
Director, Office of Site Remediation Enforcement, OECA
Deputy Director, Office of Site Remediation Enforcement, OECA
Deputy Assistant Administrator, Office of Air and Radiation
Director, OSRTI, OSWER
Director, Assessment and Remediation Division, OSRTI, OSWER
Office of General Counsel
Assistant General Counsel (CERCLA), Solid Waste & Emergency Response
 Law Office, OGC
Director, Regional Support Division, OECA
Deputy Division Director, RSD, OECA
Assistant Branch Chief, State and Tribal Site Identification Branch, OSWER
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for Public Affairs
OSWER Audit Followup Coordinator
OECA Audit Followup Coordinator
Acting Inspector General