



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

Stronger Management Controls Will Improve EPA Five-Year Reviews of Superfund Sites

Report No. 12-P-0251

February 6, 2012



Scan this mobile code to learn more about the EPA OIG.

Report Contributors:

Carolyn Copper
Patrick Milligan
Kathryn Hess

Abbreviations

CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
EPA	U.S. Environmental Protection Agency
FYR	Five-Year Review
OIG	Office of Inspector General
OSRTI	Office of Superfund Remediation and Technology Innovation
OSWER	Office of Solid Waste and Emergency Response
RPM	Remedial Project Manager

Hotline

To report fraud, waste, or abuse, contact us through one of the following methods:

e-mail: OIG_Hotline@epa.gov
phone: 1-888-546-8740
fax: 202-566-2599
online: <http://www.epa.gov/oig/hotline.htm>

write: EPA Inspector General Hotline
1200 Pennsylvania Avenue NW
Mailcode 2431T
Washington, DC 20460



At a Glance

Why We Did This Review

We evaluated the Office of Solid Waste and Emergency Response (OSWER) management controls to ensure Superfund Five-Year Reviews (FYRs) are thorough, meet policy, and lead to well-supported determinations that accurately report how well cleanup remedies protect human health and the environment.

Background

In 2007, OSWER set a goal of reviewing at least 75 percent of EPA regions' draft FYR reports to improve quality and consistency. OSWER's Office of Superfund Remediation and Technology Innovation (OSRTI) reviews the drafts for private sites. FYRs are required at sites where remedial action leaves contaminants at levels that do not allow for unlimited use and unrestricted exposure. Evaluation of the remedy should be based on and sufficiently supported by data and observations.

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

The full report is at:
www.epa.gov/oig/reports/2012/20120206-12-P-0251.pdf

Stronger Management Controls Will Improve EPA Five-Year Reviews of Superfund Sites

What We Found

The FYR process benefited from OSRTI reviews of draft reports, but improvements could be made to increase the impact of these reviews. OSRTI's reviews are intended to ensure protectiveness determinations are accurate, supported by available information, and consistent in format nationwide. OSRTI has not established sufficient management controls to make certain that FYR reports consistently meet quality standards and adhere to guidance. No formal process is in place to resolve differences when OSRTI and regions disagree on conclusions before final reports are released to the public. OSRTI reviewers did not always follow up to determine whether the region implemented recommendations, and regions sometimes disregarded valid OSRTI comments that were based on Agency guidance. We found the following cases where regions did not accept OSRTI's recommendations:

- Not enough recent data were available on site conditions; OSRTI had recommended that the region defer making a determination until additional data were collected.
- Data did not support the protectiveness determination; OSRTI had recommended a less protective determination than stated by the region.
- Construction of remedial actions was initiated at multiple operable units, but not yet complete; OSRTI had recommended that protectiveness be determined for each operable unit, consistent with Agency guidance.
- The remedy was declared to be short-term protective in spite of the region proposing significant follow-up action; OSRTI had recommended a less protective determination that agreed with the magnitude of the work to be conducted.

The lack of controls and procedures for these reviews means that OSRTI does not know the extent to which the regions implemented its recommendations. As a result, OSRTI lacks reasonable assurance its oversight is effective.

What We Recommend

We recommend that OSWER establish a process to resolve disagreements with regions on protectiveness determinations. We also recommend steps to improve the consistency, thoroughness, and communication of OSRTI reviews and to better define protectiveness determinations. OSWER agreed to the recommendations and needs to establish completion dates.



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

THE INSPECTOR GENERAL

February 6, 2012

MEMORANDUM

SUBJECT: Stronger Management Controls Will Improve
EPA Five-Year Reviews of Superfund Sites
Report No. 12-P-0251

FROM: Arthur A. Elkins, Jr.
Inspector General

A handwritten signature in black ink, appearing to read "Arthur A. Elkins, Jr.", is written over the printed name.

TO: Mathy Stanislaus
Assistant Administrator for 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. 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 audit resolution procedures.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days. You should include a corrective actions plan for agreed-upon actions, including milestone dates. Your response will be posted on the OIG's public website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal. We have no objections to the further release of this report to the public. We will post this report to our website at <http://www.epa.gov/oig>.

If you or your staff have any questions regarding this report, please contact Elizabeth Grossman at (202) 566-0838 or grossman.elizabeth@epa.gov, or Carolyn Copper at (202) 566-0829 or copper.carolyn@epa.gov.

Table of Contents

Chapters

1	Introduction	1
	Purpose	1
	Background	1
	Noteworthy Achievements.....	2
	Scope and Methodology	3
2	Oversight of Five-Year Reviews Needs to Be Better Defined and Implemented	5
	OSRTI Reviews Improve Quality of FYR Reports	5
	No Defined Procedure for Resolving Differences Between OSRTI and Regions for FYR Conclusions	5
	Other Improvements to OSRTI Review Process Needed	10
	More Accurate and Complete Communication of FYR Results and Information Needed.....	11
	Conclusions	13
	Recommendations	13
	Agency Response and OIG Evaluation	13
	Status of Recommendations and Potential Monetary Benefits.....	15

Appendices

A	Prior OIG Evaluation Reports of Specific Sites.....	16
B	Agency Response to Draft Report and OIG Evaluation	17
C	Distribution	26

Chapter 1

Introduction

Purpose

The purpose of this evaluation was to examine the Office of Solid Waste and Emergency Response's (OSWER's) oversight of Five-Year Reviews (FYRs) at contaminated sites that have been remediated or are undergoing remediation.¹ Our objective was to determine whether OSWER has effective management controls to ensure FYRs are thorough, meet policy, and lead to well-supported determinations that accurately report how well the cleanup remedy protects human health and the environment.

Background

The Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA) recently evaluated long-term monitoring at remediated Superfund sites deleted from the National Priorities List (appendix A). We believe some issues we identified should have been reported in the site FYRs but were not. For example:

- The site monitoring network was inadequate to assess whether offsite migration of contaminants had been controlled by the remedy, affecting EPA's ability to make an accurate protectiveness determination.
- Environmental sampling data did not support the site's protectiveness determination.
- Long-term sampling had not sufficiently measured ecological impacts and, therefore, the protectiveness determination could be challenged.
- Oversight of long-term monitoring did not detect the collection, reporting, and analysis of invalid data that was then used in completing the site's FYR.

FYRs are intended to evaluate implementation and performance of cleanup remedies at Superfund sites to determine whether each remedy is or will be protective of human health and the environment. According to Agency guidance, evaluation of the remedy and determination of protectiveness should be based on and sufficiently supported by data and observations. An FYR is required by law at a site where the remedy leaves conditions that do not allow for unlimited use and unrestricted exposure. A site where remedial action takes 5 or more years to

¹ FYRs are conducted at Superfund sites either to meet a statutory mandate under the Comprehensive Environmental Response, Compensation, and Liability Act, 121(c), or as a matter of EPA policy. This evaluation is limited to FYRs conducted at private sites; EPA has different oversight responsibilities for FYRs conducted at federal facilities. As such, our findings and recommendations do not apply to federal facility FYRs.

complete is subject to an FYR as a matter of Agency policy. FYRs ensure protection of human health, inform the public on conditions at these sites, and are conducted at least every 5 years. The responsibility for completing FYRs is delegated to the EPA regional administrators, but OSWER provides oversight. EPA is required to report to Congress on the results of FYRs.

Agency Response to 2006 OIG Report

The OIG reported in 2006 (*EPA Has Improved Five-Year Review Process for Superfund Remedies, But Further Steps Needed*, Report No. 2007-P-00006, issued December 5, 2006) that the Agency needed to improve the overall quality and completeness of information and conclusions in FYR reports. The problems OIG identified challenged assumptions that remedies protect human health and the environment and that Congress and the public receive accurate information on the protectiveness status of remedies. In response to our 2006 report, the Agency took action to improve the quality and consistency of FYR reports. In 2007, OSWER set a goal to review at least 75 percent of draft FYR reports. Regions were asked to send all draft FYR reports to headquarters for possible review. OSWER's Office of Superfund Remediation and Technology Innovation (OSRTI) reviews the draft reports for private sites. OSRTI has made it "a priority to issue protectiveness statements that are accurate, supported by available information, and consistent in format nationwide to the extent possible." As such, OSRTI reviews the entire draft report with a focus on areas that have the greatest impact on the protectiveness determinations of the remedies. OSRTI also provides technical assistance to regions with remedy design and construction, site deletion, operation and maintenance of remedies, and long-term monitoring activities.

Costs for Review of FYR Reports

In fiscal year 2009, EPA spent an estimated \$7.6 million conducting FYRs. OSRTI estimated that each review its staff conducted of draft FYR reports took an average of 4 hours to complete, and the review time ranged from 2 hours to more than 16, depending upon the site's complexity. Using the average salary rate given by OSRTI, we estimated the cost for OSRTI to review each FYR report to be between \$120 and \$960, with an average cost of \$240 and a total for all fiscal year 2009 reviews of approximately \$48,000. The regions estimated that their staffs took an average of 5 hours to address the OSRTI review comments, and the time spent ranged from 2 to 13 hours. Using the average salary rate given by the regions, we estimated the cost for the regions to address each OSRTI review to be between \$100 and \$872, with an average cost of \$302 and a total for all fiscal year 2009 reviews of approximately \$60,000.

Noteworthy Achievements

The Agency has taken steps to improve the quality of FYRs. OSRTI issued a policy memorandum to regions in 2007 establishing program priorities that

included steps to improve quality and consistency of FYR reports. OSRTI also issued supplements to the 2001 FYR guidance on specific media and issues. OSRTI reported to us it provided training for regional staff responsible for drafting FYR reports and reviewed over 95 percent of the draft FYR reports in fiscal years 2008 and 2009, exceeding its goal of 75 percent. OSRTI conducted its own internal assessments of FYRs and reported on these assessments at the 2009 and 2010 national meetings of EPA remedial project managers (RPMs). In comparing the results of its fiscal years 2008 and 2009 reviews, OSRTI noted that in 2009 there was greater adherence to the national guidance for FYR reports, including better use of FYR protectiveness statement language.

Scope and Methodology

We conducted this evaluation from January 2011 to September 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our evaluation objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our evaluation objective.

To meet our evaluation objective, we conducted meetings with OSRTI managers and staff and contacted managers and RPMs in four regions—Regions 1, 2, 4, and 5. We reviewed appropriate Agency guidance and policy, including the *Comprehensive Five-Year Review Guidance*, issued in 2001, and the Agency's memorandum, *Five-Year Review Program Priorities*, issued May 3, 2007. We reviewed OIG's 2006 report on FYRs and the Agency's responses. We also reviewed relevant documents, including recent EPA reports to Congress on the results of FYRs, previous OIG evaluation reports on the FYR process and long-term monitoring (appendix A), EPA planning documents, and results of internal reviews.

We reviewed 27 percent (49 of 182) of the reviews OSRTI staff conducted of draft FYR reports at non-federal sites in fiscal year 2009. OSRTI had identified these 49 reviews in its internal assessment of FYR reports as being all of the cases OSRTI recommended that the region change the protectiveness determination and the region did not make the change. We compared the OSRTI review to the final FYR report to assess whether the region appropriately responded to OSRTI reviewer comments and recommendations. We sent questions to RPMs, regional managers, and OSRTI staff on the quality and impact of OSRTI reviews for 18 cases where we identified significant disagreement between OSRTI's review and the final FYR report. We also obtained responses from OSRTI managers and staff regarding the 14 cases where the region accepted OSRTI's recommendation to change the protectiveness determination, but OSRTI's internal assessment stated that the region did not make the change.

We gathered information on the cost of FYRs from EPA's financial system and questioned OSRTI and regional managers on the costs incurred by their staff conducting reviews of draft FYR reports and responding to those reviews.

Chapter 2

Oversight of Five-Year Reviews Needs to Be Better Defined and Implemented

The reviews OSRTI provided of draft FYR reports improved final reports, but the impact of these reviews could be increased. OSRTI's reviews are intended to ensure that protectiveness determinations are accurate, supported by available information, and consistent in format nationwide. However, OSRTI needs to establish management controls to make certain that FYR reports consistently meet quality standards and follow guidance. The Agency lacks procedures for resolving differences between OSRTI and the regions, and for documenting regional decisions not to act on OSRTI recommendations. In addition, procedures are needed to improve OSRTI's reviews and the Agency's dissemination of FYR conclusions. Improvements should result in protectiveness statements that are better supported by the information provided in the FYR report and, in some cases, better protection of human health and the environment.

OSRTI Reviews Improve Quality of FYR Reports

Our evaluation showed that OSRTI reviews of draft FYR reports improved the quality of many final reports. For example, in many final reports the regions included more information to support their protectiveness determinations, as the OSRTI reviewers had recommended. Reviewers also identified problems with institutional controls as described in the draft reports at several sites. Regions improved their analyses and supporting information on institutional controls in the final reports, leading to well-supported protectiveness determinations. Regional managers and RPMs agreed that the FYR process benefited from the OSRTI reviews, citing the advantages of having independent assessments of draft reports and striving for national consistency.

No Defined Procedure for Resolving Differences Between OSRTI and Regions for FYR Conclusions

The regions and OSRTI did not have a defined procedure to resolve differences. In many of the cases we reviewed, we found significant differences between OSRTI's review comments and the information and conclusions in the final FYR reports, including in all 18 cases where we sent regional managers and RPMs questions. These cases included situations where:

- Not enough recent data and other information were available on site conditions; OSRTI had recommended deferring protectiveness determination until additional data were collected.

- Data did not support the protectiveness determination; OSRTI had recommended a less protective determination than stated by the region.
- Construction of remedial actions was initiated at multiple operable units, but not yet complete; OSRTI had recommended that protectiveness be determined for each operable unit, consistent with Agency guidance.
- The remedy was declared to be short-term protective in spite of the region proposing significant follow-up action; OSRTI had recommended a less-protective determination that agreed with the magnitude of work to be conducted.

OSRTI provided written comments to the site RPMs on their draft FYR reports. OSRTI reviewers offered to meet further with the regions if clarification on comments was needed. However, the regions did not always engage the OSRTI reviewers further. In addition, OSRTI reviewers did not consistently follow up with the regions to determine whether comments were addressed and how, and whether the final protectiveness determinations were supported by the revisions. When conducting an internal assessment of its reviews of draft FYR reports, OSRTI did not consult the final FYR reports. Instead, OSRTI used information entered into a database by the regions. Without formal follow-up and resolution, some final FYR reports may contain unsupported protectiveness determinations. While the preparation and approval of FYR reports has been delegated to the regional administrators, the protectiveness determinations in those reports should be consistent with standards issued by the Agency. In addition, without determining the results and impacts of its reviews, OSRTI management is limited in measuring the effectiveness of its oversight work.

Differences Between OSRTI and Regions

Not Enough Recent Data Available on Site Conditions

Regions did not accept OSRTI's recommendation that the protectiveness determination be deferred until additional information was obtained in two-thirds of the 18 cases where we sent regional managers and RPMs questions. In most cases, the region said it did not accept OSRTI's recommendations because information deficiencies only affected the region's ability to determine *long-term* protectiveness, not *short-term* protectiveness. However, we were provided no evidence to support the regions' assertions. There were three cases of insufficient data where a major component of the remedy at each site was "monitored natural attenuation." Natural attenuation means chemical and biological conditions in the groundwater should be causing contaminants to degrade. In each case, the OSRTI reviewer commented in writing that sufficient data had not been collected to determine whether the contaminants were degrading as anticipated. The OSRTI reviewer suggested that the region defer declaring protectiveness until needed data could be collected and analyzed. However, in each case, the region made a

protectiveness determination without including additional information in the final FYR.

In some cases, the OSRTI reviewer suggested the region include data that was missing, but did not cite the FYR guidance that “evaluation of the remedy and the determination of protectiveness should be based on and sufficiently supported by data and observations.” Further, the guidance states that the report should “contain the data and information necessary to support all findings and conclusions.” In addition to suggesting the data be included in the report, the reviewer should have cited the FYR guidance as support for the suggestion. Citing the guidance could be an effective method for communicating to the region the importance of including data in the report to support the findings and conclusions.

Data Did Not Support Protectiveness Determination

We found cases where the protective status declared in the final FYR report was more protective than could be supported by data and other information included in the report. OSRTI pointed out these problems in its reviews of the draft reports, but did not have a procedure in place to resolve issues and ensure that regions modified their reports accordingly.

- One case involved a final FYR report that stated the review of groundwater data, documents, cleanup standards, and risk assumptions indicated the remedy was not functioning as intended by the record of decision. The OSRTI reviewer commented that the remedy was *not protective* because the remedy did not appear to be functioning as intended. The final FYR report laid out plans to install new wells, initiate efforts to capture the migrating groundwater contamination, and conduct a new water use survey. These are significant actions for a remedy that EPA declared to be “construction completed” 10 years previously. However, the final FYR report declared the remedy *protective in the short-term* because “there are no exposure pathways,” which is a statement inconsistent with plans to conduct a new water use survey.
- In another case, monitoring showed a contaminant at concentrations greater than 100 times the drinking water standard seeping from the groundwater to a river a half-mile upstream from a major city’s drinking water intake. The region declared the remedy *protective in the short-term* partly because monitoring results at the intake showed contaminant concentrations were below the standard. The OSRTI reviewer recommended a *not protective* determination in agreement with the state’s position.

In both of these cases, a resolution procedure was warranted to ensure that the final FYR reports included well-supported declarations on how or whether cleanup remedies protect human health and the environment.

Regions Did Not Follow Agency Guidance for Remedies Under Construction

We identified three sites at which the regions did not follow Agency guidance for remedies under construction. In all three cases, the OSRTI reviewer recommended that the region change its protectiveness determination. However, changes were not made, even though recommended changes would have been consistent with Agency guidance.

According to Agency guidance, the three protectiveness statement options for a remedy still under construction are:

1. The remedy *is expected* to be protective of human health and the environment upon completion.
2. The remedy *is not protective* because of issues described and actions need to be taken to ensure protectiveness.
3. A protectiveness determination *cannot be made* until further information is obtained.

Protective in the short-term is not provided in the guidance as an example of protective determinations available for a remedy still under construction. Nonetheless, we identified two cases where the remedy was declared in the final FYR report as being *protective in the short-term*.

In the third case, the region did not include all operable units in the final FYR report. Agency guidance allows for separate FYRs for operable units at complex sites. However, the guidance also states that no unit should be reviewed later than 5 years after initiation of its remedial actions. In this case, more than 5 years had passed at both operable units. As such, FYRs should have been conducted on both, as requested by the OSRTI reviewer. Less than 10 months after issuing the final FYR report that included only one unit, the region reclassified and closed out the special account funds for this site. The region mistakenly stated in its closeout memorandum that the 2009 FYR report had concluded that remedies at both units continue to provide adequate protection of human health and the environment.

Short-Term Protectiveness Not Defined

In over 80 percent of the cases we examined in detail (15 of 18), the region had declared the remedy to be protective of human health and the environment in the *short-term*. The range in conditions varied greatly at these sites and in examples given in Agency guidance. We found that regions were using

protective in the short-term even when serious issues had been identified at sites that warranted considerable follow-up action similar to that needed for a site declared *not protective*. At the other extreme, we found examples in the Agency guidance where the constructed remedies were protective as intended, but other restrictions on site use were yet to be implemented. Current Agency guidance does not adequately define what is meant by *short-term protective*. Consequently, this could result in misuse of *short-term protective* determinations.

We raised this issue in our 2006 report, and recommended that the Agency revise its guidance to more clearly define *short-term* and *long-term protectiveness*. However, the Agency decided not to act on that recommendation, stating that “the Five-Year Review guidance clearly defines *short-* and *long-term protectiveness* determinations” and “includes several example scenarios for the appropriate use of protectiveness determinations.” Because of the wide ranging use of *short-term protective*, we believe that this determination currently is not clearly defined. OSRTI needs to provide greater clarity on which situations are acceptable under a *short-term protective* determination to prevent misuse of this determination.

OSRTI’s Oversight Process Does Not Include Formal Resolution

We found that OSRTI’s oversight of FYRs could be improved by including formal resolution of disagreements between OSRTI and the regions on issues related to remedy protectiveness. In response to the OIG’s 2006 recommendations on FYRs, the Agency said that increased headquarters’ review would address the FYR quality problems we identified. We recognize that improvements have been achieved. However, in our opinion, the current review process can be revised to consistently obtain greater impact by adding formal resolution, as the Agency currently practices with disagreements over remedy selection in the record of decision.

We sent questions to RPMs and regional managers for 18 of the cases where we identified there were important but unresolved disagreements between OSRTI and regions. Many of the comments OSRTI had made in its reviews of the draft FYR reports went unaddressed by the regions in the final reports. The regional responses to our questions still did not provide sufficient information to support the protectiveness determinations. These cases are examples where regions are issuing final reports with issues unresolved. A more formal and thorough review process would call for the regions and OSRTI to resolve disagreements before a final FYR report is issued and would lead to better supported protectiveness determinations. Currently, with no formal resolution process, regions proceed with approving FYR reports without resolving disagreements with OSRTI.

Other Improvements to OSRTI Review Process Needed

To improve the quality of FYR reports, OSRTI reviews of draft reports could be more standardized and could more consistently address the report elements listed in Agency guidance. More consistency in how OSRTI staff structure their reviews can help ensure that all reviewers approach the reviews similarly, comments are directed at key issues and clearly communicated, and regions receive review comments in a form that facilitates their attention to the reviewer's major points. These improvements should lead to FYR reports that better document long-term stewardship of sites and whether the remedies continue to protect human health and the environment.

We found some of the 49 written reviews we examined to be more effective than others in communicating key points and describing significant problems identified in the draft reports. Some reviewers assembled their comments in a separate document, listing the most significant comments and recommendations first, followed by minor technical, grammatical, and format comments. These reviews effectively communicated problems with support for the protectiveness determination. Other reviewers arranged comments by page number or embedded comments in the electronic version of the draft report, making it difficult to readily identify the reviewer's major points. In these cases, EPA regional staff, responding to the review, could overlook key comments from OSRTI, and the final FYR report could be issued without consideration of those comments.

To better document OSRTI's communication with the region and resolution of differences between OSRTI and the region, OSRTI could develop a brief review summary sheet to accompany each review. This sheet could include:

- The reviewer's agreement with the draft determination or the reviewer's recommended change and the reasons behind that recommendation
- Basic site and reviewer information, such as the name of the site, the site RPM, the OSRTI reviewer, and key milestone dates
- A place for the region's response and resolution of any disagreements between the regions and OSRTI

A management control such as using this summary sheet would simplify communication with the regions by providing a consistent, easily understood summary. The sheet also may improve the final FYR reports by clearly communicating problems the OSRTI reviewer identified with the draft protectiveness determination and documenting the review and resolution of differences between OSRTI and the region.

OSRTI developed a checklist for its internal use when reviewing draft FYR reports. We found the checklist could be improved. The checklist is similar in many ways to the FYR report checklist provided in Agency guidance. The review checklist includes useful information, such as prompts to check whether site

monitoring data are discussed, site data are included in the back of the document, and data indicate that the remedy is operating and expected to achieve remedial action objectives. However, key items are missing from the current internal checklist. For example, there is no reminder to the reviewer to cite specific occurrences where the draft was not consistent with Agency policy and guidance. Inclusion of data and site maps is designated as optional in the appendices section of the checklist, but Agency guidance states that data and information to support the protectiveness determination should be included in the FYR report.

Further, regular use of the checklist by reviewers should improve the quality of OSRTI's reviews and promote national consistency. There was insufficient evidence to determine whether OSRTI staff consistently consulted the checklist. We were told that use of the checklist is optional by OSRTI staff. We believe that use of the checklist should be part of the review process, and each completed checklist should be retained with the review summary sheet and the written review comments as part of OSRTI's records for the site. This information would be useful 5 years later when the remedy is again evaluated.

More Accurate and Complete Communication of FYR Results and Information Needed

The Agency has taken steps to provide results of FYRs to the public:

- The protectiveness status and corrective actions needed are entered into a national database for each site.
- Results of FYRs are reported to Congress.
- FYR reports are made available online.
- The front piece of each FYR report contains a summary form.
- Links to the FYR reports are included on the publicly available, online *Superfund Site Progress Profile* for each site.

We identified changes that could be made in each of these efforts to improve the Agency's communication of the results of FYRs to the public.

We asked OSRTI staff, regional program managers, and RPMs about procedures for ensuring that accurate data on results of FYRs—protectiveness status and corrective actions needed—are entered into the national database, the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). We were consistently told that regions had procedures in place to correctly enter and verify data. However, we found data entry errors with some protectiveness determinations. OSRTI had identified 49 cases where it disagreed with the region on the protectiveness determination, but our assessment found cases where the 2 parties actually agreed. OSRTI had referred to CERCLIS for the region's final determination, and in six cases, the regions had entered the incorrect protectiveness status into the database. In five of the six cases, the region entered a remedy status that was more protective than

that given in the final FYR report. In the sixth case, the region entered a status that was less protective. OSRTI has worked with the regions to correct the status in two cases after we brought the data entry errors to OSRTI's attention.

We also found that the protectiveness status for these sites was incorrectly listed in the Report to Congress sent by the EPA Administrator on September 28, 2010. The Superfund law requires that the Agency report to Congress a list of sites for which FYRs were required, the results of the reviews, and any actions taken as a result of such reviews. If OSRTI continues to rely on CERCLIS for its required reporting to Congress, it needs to provide greater assurance of the quality of the data by verifying the protectiveness status in the database against those in the final FYR reports.

The Agency does not consistently provide in the online FYR report the site data and other information used to support its protectiveness determination. We found 13 cases (or 27 percent of the 49 reviewed) where the monitoring data and other site information was placed in FYR report appendices that were not included in the report file available online. This information is the foundation for the technical analysis that supports the protectiveness determination. In an FYR program initiatives memorandum, the Agency requested that regions offer complete reports to the public online. We believe the posted information should include the maps, data tables, and other information contained in the report appendices.

The summary form at the beginning of each FYR report is intended to communicate the basic results of the FYR. Included on the summary form is a place to explain the protectiveness determination, but these explanations in many of the FYR reports we examined were long and confusing. We found that in many cases the protectiveness statements in the summaries were reiterations of complex statements made in the body of the report. As a result, these summaries did not effectively communicate the protectiveness status of the site remedy to the community. The summary form should succinctly inform the public of the results of the FYR and clearly list the protectiveness status.

The Agency provides the public information on the progress of cleanup at each site through an online *Superfund Site Progress Profile*. The *profile* does not include the results of FYRs in the same manner as information on the progress of other stages of the cleanup, which is displayed through easily understood graphics. Only an electronic link to the latest FYR report is provided. The *profile* should effectively inform the public of the results of the FYR and include the protectiveness status as a graphic.

Conclusions

OSRTI lacks procedures to obtain resolution and agreement on protectiveness determinations before final FYR reports are issued. OSRTI reviews of draft FYR reports added value to the FYR process by improving the quality of many reports reviewed. However, additional improvements and management controls are needed to ensure that the reviews consistently produce accurate and well supported statements. The Agency has not clearly defined what conditions are acceptable under a short-term protective determination. Additionally, the Agency's communication of protective status to the public can be confusing and could be clearer. These shortcomings reduce the Agency's assurance that the FYR process is effective and protectiveness determinations are accurate and supported.

Recommendations

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

1. Establish management controls to ensure:
 - a. OSRTI and the regions resolve and fully document disagreements on remedy protectiveness determinations for FYR reports where OSRTI recommended "not protective" or "deferred" determinations.
 - b. Reviews of draft FYR reports use consistent criteria.
 - c. Results of FYR reports are accurately entered into CERCLIS, correctly reported to Congress, and fully communicated to the public.
2. Clearly define protectiveness categories in Agency guidance or policy and ensure definitions are consistently applied across the Agency.

Agency Response and OIG Evaluation

OSWER agrees with the OIG's recommendations, as modified following OSWER's written response to the draft report and discussion with OIG personnel. Where appropriate, the OIG made changes to the report based on OSWER's response. OSWER's response and the OIG's evaluation of those comments are in appendix B.

OSWER agrees to take steps to ensure that:

1. OSRTI and regions resolve and fully document disagreements on remedy protectiveness for FYR reports where OSRTI recommended "not protective" or "deferred" determinations
2. Reviews of draft FYR reports use consistent criteria

3. Results of FYR reports are accurately entered in the Agency database, correctly reported to Congress, and fully communicated to the public

OSWER also agrees to clearly define protectiveness categories and ensure those definitions are consistently applied.

The OIG accepts the corrective actions described by OSWER as meeting the intent of the recommendations, as revised. However, these recommendations are designated as unresolved with resolution efforts in progress until completion dates are established. In its 90-day response to the final report, OSWER should provide milestone dates for completion of the corrective actions.

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	13	Establish management controls to ensure: <ul style="list-style-type: none"> a. OSRTI and the regions resolve and fully document disagreements on the remedy protectiveness determinations for FYR reports where OSRTI recommended "not protective" or "deferred" determinations. b. Reviews of draft FYR reports use consistent criteria. c. Results of FYR reports are accurately entered into CERCLIS, correctly reported to Congress, and fully communicated to the public. 	U	Assistant Administrator for Solid Waste and Emergency Response			
2	13	Clearly define protectiveness categories in Agency guidance or policy and ensure definitions are consistently applied across the Agency.	U	Assistant Administrator for Solid Waste and Emergency Response			

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

Prior OIG Evaluation Reports of Specific Sites

Superfund site	Report number	Date	Report title
Bruin Lagoon	10-P-0217	September 2010	EPA Should Improve Oversight of Long-term Monitoring at Bruin Lagoon Superfund Site in Pennsylvania http://www.epa.gov/oig/reports/2010/20100908-10-P-0217.pdf
Delatte Metals	09-P-0029	November 2008	EPA's Safety Determination for Delatte Metals Superfund Site Was Unsupported http://www.epa.gov/oig/reports/2009/20091119-09-P-0029.pdf
Jones Sanitation	09-P-0243	September 2009	Independent Sampling Generally Confirms EPA's Data at the Jones Sanitation Superfund Site in New York http://www.epa.gov/oig/reports/2009/20090923-09-P-0243.pdf
Neal's Dump	09-P-0110	March 2009	Results of Independent Groundwater Sampling at Neal's Dump Superfund Site http://www.epa.gov/oig/reports/2009/20090304-09-P-0110.pdf
PAB Oil	10-P-0229	September 2010	EPA Should Improve Oversight of Long-Term Monitoring at PAB Oil and Chemical Services, Inc., Superfund Site in Louisiana http://www.epa.gov/oig/reports/2010/20100921-10-P-0229.pdf
Wheeler Pit	10-P-0218	September 2010	Independent Ground Water Sampling Generally Confirms EPA's Data at Wheeler Pit Superfund Site in Wisconsin http://www.epa.gov/oig/reports/2010/20100908-10-P-0218.pdf
Wheeling Disposal	11-P-0034	December 2010	EPA Should Improve Its Oversight of Long-Term Monitoring at Wheeling Disposal Superfund Site in Missouri http://www.epa.gov/oig/reports/2011/20101220-11-P-0034.pdf
Wildcat Landfill	10-P-0055	January 2010	Changes in Conditions at Wildcat Landfill Superfund Site in Delaware Call for Increased EPA Oversight http://www.epa.gov/oig/reports/2010/20100126-10-P-0055.pdf

Source: EPA OIG.

Agency Response to Draft Report and OIG Evaluation

November 4, 2011

MEMORANDUM

SUBJECT: Response to OIG Draft Audit Report, *Stronger Management Controls Will Improve EPA Five-Year Reviews of Superfund Sites*

FROM: Mathy Stanislaus
Assistant Administrator

TO: Wade Najjum
Assistant Inspector General
Office of Program Evaluation

Thank you for the opportunity to review and respond to the Office of Inspector General (OIG) draft audit report, *Stronger Management Controls Will Improve EPA Five-Year Reviews of Superfund Sites* dated October 4, 2011.

We appreciate the continued dialogue and openness that the OIG team has afforded the Office of Solid Waste and Emergency Response (OSWER) during the course of this audit.

First, we would like to address each of the recommendations and provide information about planned or initiated actions related to those recommendations. Second, we provide additional comments to ensure that the final audit report contains accurate information.

Before addressing the recommendations and the report, it is worth noting how this audit was initiated. In 2009, staff from the Office of Superfund Remediation Technology and Innovation (OSRTI) presented an evaluation on five-year reviews at the Annual National Remedial Project Manager (NARPM) training conference where staff from the OIG was present. While OIG staff built on this evaluation, OSRTI was already well aware of many of the issues and was working towards addressing them.

Improving five-year reviews has been a focus of OSWER and OSRTI since the August 27, 2001 *Five-Year Review Program Initiatives* memorandum (OSWER Directive 9355.7-07) following previous Inspector General audits in 1995 and 1999. While OSWER does not agree with all the recommendations made by the OIG, we will continue to work with the OIG on efforts to strengthen five-year reviews.

OIG RECOMMENDATIONS AND OSWER RESPONSE

OIG Recommendation 1a: Establish management controls to ensure: OSRTI and the regions resolve disagreements on the remedy protectiveness determinations and other significant issues in each draft FYR report and that the resolution process is fully documented.

OSWER Response:

OSWER does not agree with the recommendation as written. We are committed to ensuring that significant disagreements between OSRTI and the regions related to protectiveness in draft Five-Year Review (FYR) are resolved. As a result, OSWER will implement a formal, documented process for resolving significant disagreements where the headquarters' reviewer recommends a "not protective" determination and the region disagrees. OSWER will document the resolution process following a process similar to the one described in the *Elevating Site-Specific Superfund Remedy Selection Issues between the Office of Superfund Remediation and Technology Innovation and Regional Superfund Program Offices* memorandum, dated March 31, 2010. OSWER recommends modifying recommendation 1a as follows: Establish management controls to ensure: OSRTI and the regions resolve and fully document all significant disagreements in each FYR report where the remedy protectiveness determination is evaluated by headquarters' to be "not protective" and the region disagrees.

OIG Response 1: In a December 12, 2011, meeting, OIG and OSRTI managers agreed that OSRTI and the regions will resolve and fully document disagreements on remedy protectiveness determinations for FYR reports where OSRTI recommended "not protective" or "deferred" determinations.

In its 90-day response to the final report, OSWER should explain how it will establish the resolution process with the regions and provide milestone dates for when the resolution process will be implemented. This recommendation is designated as unresolved with resolution efforts in progress.

OIG Recommendation 1b: Establish management controls to ensure: Reviews of FYR reports use consistent criteria, format, and communication style.

OSWER Response:

OSWER does not agree with this recommendation as written. OSWER agrees that the use of a consistent set of criteria for review of draft FYRs is appropriate. As a result, OSWER will revise and enhance the *Headquarters' Review Checklist for Draft Five-Year Review Reports* and will make use of the checklist a routine part of the headquarters' review process. However, using a structured format and communication style to address key issues in the FYR will not necessarily lead to better documented FYRs. Achieving those goals is not based on structuring our reviews, but rather by tailoring our reviews to meet the individual needs of each region.

OSWER recommends modifying recommendation 1b to delete the recommendation that headquarters use a consistent "format, and communication style" when evaluating draft FYRs.

OIG Response 2: We accept OSWER’s suggested revision to recommendation 1b and revised the recommendation to read: “Establish management controls to ensure reviews of draft FYR reports use consistent criteria.” In its 90-day response to the final report, OSWER should explain how it will ensure that reviews of FYR reports use consistent criteria and provide milestone dates for when the reviews will follow consistent criteria. This recommendation is designated as unresolved with resolution efforts in progress.

OIG Recommendation 1c: Establish management controls to ensure: Results of FYR reports are accurately entered into CERCLIS, correctly reported to Congress, and fully communicated to the public.

OSWER Response:

OSWER agrees with the recommendation. To improve the accuracy of the FYR data entered into CERCLIS, OSRTI has initiated modifications to the *Five-Year Review Summary Form* to more closely reflect the FYR data entry fields in CERCLIS. These modifications should improve the overall accuracy of the FYR data entered in CERCLIS and minimize errors in the annual Report to Congress. Additionally, as of fiscal year 2011 the file megabyte limit on EPA web pages has been substantially increased so that OSWER can now typically make the entire private site FYR report, including appendices, available to the public on-line. In addition, hard copies of completed FYR reports are and will continue to be available for public review in local repositories and the Regional offices. We will also modify the Superfund site progress profiles to include the protectiveness determination.

OIG Response 3: OSWER’s proposed corrective actions meet the intent of recommendation 1c. In its 90-day response to the final report, OSWER should provide milestone dates for completing revisions to the Five-Year Review Summary Form, making complete reports available to the public online, and modifying the site progress profiles to include the protectiveness determination. This recommendation is designated as unresolved with resolution efforts in progress.

OIG recommendation 2: Clearly define protectiveness categories in Agency guidance or policy and ensure definitions are consistently applied across the Agency.

OSWER Response:

OSWER agrees with the recommendation. We will issue a directive to the Regional Superfund Program offices clarifying the protectiveness categories used in the *Comprehensive Five-Year Review Guidance*, OSWER Directive No. 9355.7-03B-P (June 2001), and monitor use of those definitions during the routine headquarters’ review of the draft FYRs.

OIG Response 4: OSWER’s proposed corrective actions meet the intent of recommendation 2. In its 90-day response to the final report, OSWER should provide milestone dates for issuing the directive to the regions clarifying the protectiveness categories. This recommendation is designated as unresolved with resolution efforts in progress.

OTHER OSWER COMMENTS:

At a Glance/What We Found

Comment 1: Second bullet. The phrase “remedies that were less” should be replaced with “a protectiveness determination that was less.”

OIG Response 5: We accept the intent of the requested change and revised the report as follows: “Data did not support the protectiveness determination; OSRTI recommended a determination that was less protective than stated by the region.”

Comment 2: Third bullet. The language is not consistent with the language used in the Superfund program. The Superfund 2001 FYR guidance requires that the region make a protectiveness statement for each operable unit, not “each completed phase.” We recommend replacing the current language with the following: “Site remedies are implemented as multiple projects which may occur across multiple operable units. OSRTI recommended that protectiveness statements be made for each operable unit where construction has been initiated. Likewise, OSRTI recommended that protectiveness statements are not required for operable units where construction has not been initiated.”

OIG Response 6: We accept the intent of the requested change and revised the report as follows: “Construction of remedial actions was initiated at multiple operable units, but not yet complete; OSRTI recommended that protectiveness be determined for each operable unit, consistent with Agency guidance.”

Chapter 1/Purpose

Comment 1: Page 1, first paragraph, first sentence: OSWER recommends replacing the first sentence of the paragraph with language that is more consistent with FYR guidance and policy.

For example, “The purpose of this evaluation was to examine the Office of Solid Waste and Emergency Response (OSWER’s) oversight of Five-Year Reviews at Superfund sites conducted either to meet a statutory mandate under CERCLA 121(c) or as a matter of EPA policy.”

OIG Response 7: We added information on statutory mandate and EPA policy to the footnote 1 in the purpose section of the report.

Chapter 1/Background

Comment 1: Page 1, first paragraph: OSWER disagrees with the second sentence, “Some issues the OIG identified should have been detected in the site FYRs but were not.” It is not clear in the text of the report, whether the issues identified by the OIG should have been detected by the headquarters’ review of the FYR report or if the issues should have been detected by the regions during the FYR process. It is not appropriate to presume that data collected during the OIG review would have changed the issues identified in a FYR conducted at an earlier date. We

recommend this sentence be deleted; it is unclear, misleading and not supported by the information presented in this report.

OIG Response 8: We accept the intent of the requested change and revised the report as follows: “We believe some issues we identified should have been reported in the site FYRs but were not.”

Comment 2: Page 1, last paragraph: OSWER disagrees with second to the last sentence, “An FYR is required by law at a site where the remedy leaves conditions that does not allow for unlimited use and unrestricted exposure.”

We recommend replacing this sentence with the following: “Under the Agency’s interpretation contained in the NCP, the FYR requirement in CERCLA §121(c) is triggered when hazardous substances, pollutants, or contaminants remain on-site above levels that allow for “unlimited use and unrestricted exposure.”

OIG Response 9: We modified the sentence. Reference to CERCLA was added to footnote 1. See OIG Response 7.

Chapter 1/Agency Response to 2006 OIG Report

Comment 1: Page 2: OSWER disagrees with the second to last sentence, “As such, OSRTI reviews focus on areas of draft FYR reports that have the greatest impact on the protectiveness determinations.”

We recommend replacing this sentence with the following: “As such, OSRTI reviews the entire FYR report, especially those areas that have the greatest impact on the protectiveness determination.”

OIG Response 10: We accept the change. We revised the report as follows: “As such, OSRTI reviews the entire draft report with a focus on areas that have the greatest impact on the protectiveness determinations of the remedies.”

Chapter 1/Scope and Methodology

Comment 1: Page 3, third paragraph: OSWER recommends adding the word “all” to the second sentence, “This was a judgmental sample comprised of (all) the cases where OSRTI had recommended the region change the protectiveness determination and the region did not agree.

OIG Response 11: We accept the change of adding “all” to the sentence. It reads as follows: “OSRTI had identified these 49 reviews in its internal assessment of FYR reports as being all of the cases OSRTI recommended that the region change the protectiveness determination and the region did not make the change.”

Comment 2: Page 3, Third paragraph: OSWER recommends making the following change to the last sentence: “... we had on the quality and impact of OSRTI review for 18 of the 49 cases where we identified significant disagreement between OSRTI’s review and the final FYR report.

Our identified discrepancies were 9.8% (18 of the 182 reviews) of the total FYR reports reviewed by OSRTI.”

OIG Response 12: In a December 12, 2011, meeting between OSRTI and OIG, we explained that we could not agree to the requested addition because we did not examine all 182 reviews.

Chapter 2

Comment 1: Page 5, first paragraph: OSWER recommends making the following change to the fourth sentence: “The Agency lacks (formal) procedures for resolving differences between OSRTI and the regions ~~and for requiring regions to act on OSRTI’s recommendations.~~”

The FYR is not a decision document and the FYR process is delegated to the region and does not include a HQ concurrence role. As such, we cannot “require” the regions to implement our recommendations. In addition, the regions may have a good reason for not taking our recommendation(s). Typically, the regions have more specific knowledge of the sites and a better understanding of the site contaminants, potential exposures and operation of the remedy.

OIG Response 13: We accept the suggested change to remove the verb “require”: “The Agency lacks procedures for resolving differences between OSRTI and the regions and for documenting regional decisions not to act on OSRTI recommendations.”

Comment 2: Page 5, first paragraph: OSWER recommends modifying the last sentence to read: “Improvements should result in protectiveness statements that are better supported by the information provided in the FYR.”

Implementation of the reviewer’s recommendation will not necessarily result in “better protection of human health and the environment,” they are likely to lead to greater transparency and a clearer presentation of site conditions.

OIG Response 14: We accept some of the suggested changes, such as adding “...statements that are better supported by the information provided in the FYR report...”

Chapter 2/No defined Procedure for Resolving Differences Between OSRTI and Regions for FYR Conclusions

Comment 1: Page 6, second bullet: Replace the word “phase” with “operable units” or “OU” as appropriate.

OIG Response 15: We accept the suggested change to replace “phase” with “operable unit.”

Comment 2: Page 6, first full paragraph, 5th sentence: “Even when conducting its own internal assessments, OSRTI did not consult the final FYR reports to identify the protectiveness status and whether the region corrected problems identified in the OSRTI review.”

OSWER recommends that this sentence be clarified to state: “When conducting its own internal assessment of headquarters’ comments on the FYR reports, OSRTI did not consult the final FYR reports. Instead, OSRTI used the protectiveness determination information entered into CERCLIS by the regions to conduct their internal review.”

OIG Response 16: We accept the suggested change: “When conducting an internal assessment of its reviews of draft FYR reports, OSRTI did not consult the final FYR reports. Instead, OSRTI used information entered into a database by the regions.”

Comment 3: Page 6, first full paragraph: OSWER recommends deleting the 6th sentence: “Without formal follow up and resolution, final FYR reports may contain unsupported protectiveness determinations.”

This is an assertion without a basis in fact. Based on the small number of FYRs reviewed by the OIG, it would be difficult to draw this conclusion. The regions remain responsible for supporting their protectiveness determinations.

OIG Response 17: We do not accept OSWER’s recommendation to delete the sentence. Our review of a small number of FYR reports shows cases where the final reports contain unsupported protectiveness determinations. If OSWER does not implement follow-up and resolution controls over its reviews, particularly in cases where it has identified unsupported protectiveness determinations, final FYR reports may contain unsupported protectiveness determinations. Our report shows that regional responsibility for supporting the protectiveness determinations, alone, is not an effective management control. To address the Agency’s concerns, we have added “some” to the sentence to indicate that this situation is possible.

Chapter 2/Differences Between OSRTI and Regions

Comment 1: Page 7, first full paragraph: OSWER recommends deleting this paragraph, it’s an unnecessary additional workload for OSRTI and there is no evidence presented in the report that citing the FYR guidance would have an impact on either the regions’ willingness to take our comments or their protectiveness determination.

OIG Response 18: We do not accept OSWER’s recommendation to delete the paragraph. The paragraph describes a process where the OSTRI reviewer would be communicating to the region what the Agency’s internal controls are for ensuring FYRs are properly conducted. The Agency’s internal control is the FYR guidance. Under OMB Circular A-123, *Management’s Responsibility for Internal Control* (see: http://www.whitehouse.gov/omb/circulars_a123_rev), “management is responsible for establishing and maintaining internal control to achieve the objectives of effective and efficient operations, reliable financial reporting, and compliance with applicable laws and regulations.” In fulfilling these obligations, management creates and reinforces a culture that adheres to internal controls by communicating and reinforcing throughout the organization what the internal controls are.

Comment 2: Page 8: OSWER recommends replacing “three” with “four” in the following sentence: “According to Agency guidance, the four options for a remedy under construction.”

Please reference the 2001 FYR guidance, Section 4.5.1, Exhibit 4-6, page 4-21. “Protective” is an option for sites under construction.

OIG Response 19: We do not accept the recommended revision. In the second column of Exhibit 4-6, the 2001 FYR guidance lists three protectiveness statements, not four. As such, we did not change the number. We did revise the wording in the report to clearly indicate that we are referring to protectiveness statements (the second column of Exhibit 4-6).

Comment 3: Page 8, last paragraph: OSWER recommends deleting the sentence that begins, “Less than 10 months...” The closing of a site special account has no bearing on the FYR process or the Agency’s ability to address any recommendations in a FYR.

OIG Response 20: We do not accept OSWER’s recommendation to delete the sentence. We do not state that the closing of the site special account has any bearing on the FYR process or the Agency’s ability to address any recommendations in a FYR report. However, if the Agency was relying on special account funds to fund FYRs and the actions recommended in FYRs (which does occur), closing an account and reclassifying funds prematurely could result in the Agency having to bear the cost of conducting future FYRs and corrective actions and potentially needing to rely on Superfund appropriations to fund such activity.

Comment 4: Page 9, first paragraph: OSWER recommends clarifying the sentence that begins, “We found that regions...” Although remedies may have “serious issues” and “warranted considerable follow up action,” if the performance issues are not resulting in unacceptable exposures the site would be considered short-term protective. It is misleading to compare this situation with a determination of “not protective.” Please see, the *Comprehensive Five-Year Review Guidance*, OSWER No. 9355.7-03B-P, Section 4.5 (page 4-14).

OIG Response 21: We make the recommendation that OSWER “clearly define protectiveness categories in Agency guidance or policy.” OSWER agreed with this recommendation and said it would issue a directive to the regional offices clarifying the protectiveness categories. The wide range of conditions that currently fall under the *short-term protective* category needs to be clarified. In our opinion, a single protectiveness status should not be so broad to include both remedies that have serious issues that warrant considerable follow-up action, and remedies that are functioning as intended, but need institutional controls in place to ensure future exposures are limited.

Chapter 2/Other Improvements to OSRTI Review Process Needed

Comment 1: Page 10, first four paragraphs including bullets: OSWER recommends that these paragraphs be deleted. There are no data that suggest regions will more readily agree to accept our comments if they are presented in a particular structure, format or order. In fact, too much emphasis on the format of the headquarters’ written reviews may have a negative effect on comments in other areas of the document and may reduce the overall effectiveness of our review. This is consistent with OSWER’s response to Recommendation 1b.

OIG Response 22: In a December 12, 2011, meeting, OIG and OSRTI managers agreed to retain these paragraphs with minor changes suggested by OSRTI.

Chapter 2/More Accurate and Complete Communication of FYR Results and information Needed

Comment 1: Page 12, first paragraph: OSWER recommends clarifying what is meant by “overstating” or “understating” remedy protectiveness.

OIG Response 23: We accept the suggested change and clarified in the final report: “In five of the six cases, the region entered a remedy status that was more protective than that given in the final FYR report. In the sixth case, the region entered a status that was less protective. OSRTI has worked with the regions to correct the status in two cases after we brought the data entry errors to OSRTI’s attention.”

Comment 2: Page 12, third paragraph: OSWER recommends clarifying this paragraph, please include the citation for the statement “the region needs to offer the complete report to the public on line.” The first sentence implies that site data are not publicly available, while often data are available from regional websites or national websites. Initially, we were constrained in the size of files we could post on the web, which prevented us from publishing complete appendices on line. Tables of data that are routinely found in appendices are typically of little interest to the general public. If the public is interested, such data are available at the site information repositories. Additionally, as of fiscal year 2011 the file megabyte limit on EPA web pages has been substantially increased so that OSWER now can typically make the entire private site FYRs, including appendices, available to the public on-line.

OIG Response 24: We accept the suggested change to clarify the paragraph. In a Five-Year Review Program Initiatives memorandum (No. 9355.7-07, dated August 27, 2001), OSWER requested of the regions that “the complete report [is to] be made available to the general public through the regional internet web page.” We consider the tables and maps to be part of the complete report. OSWER responded that it could typically make the information available. We maintain that this information should always be made available. We agree with OSWER’s planned action to provide online all components of FYR reports, including the appendices.

Thank you for the opportunity to review the draft report. If you have any questions regarding our comments, please contact David Cooper at 703-603-8763 or Johnsie Webster, OSWER Audit Liaison at 202-566-1912.

cc: Lisa Feldt, OSWER
Barry Breen, OSWER
Barbara Hostage, OSWER/OPM
James Woolford, OSWER/OSRTI
Elizabeth Southerland, OSWER/OSRTI
Robin Richardson, OSWER/OSRTI
Cheryl Upton, OSWER/OSRTI
David Cooper, OSWER/OSRTI
John Smith, OSWER/OSRTI
Mike Hurd, OSWER/OSRTI
Regional Superfund National Program Mangers

Distribution

Office of the Administrator
Assistant Administrator for Solid Waste and Emergency Response
Agency Follow-Up Official (the CFO)
Agency Follow-Up Coordinator
General Counsel
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for External Affairs and Environmental Education
Audit Follow-Up Coordinator, Office of Solid Waste and Emergency Response