U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

EPA Could Improve Contingency Planning for Oil and Hazardous Substance Response

Report No. 13-P-0152 **February 15, 2013**

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Abbreviations

ACP	Area Contingency Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NRT	National Response Team
OEM	Office of Emergency Management
OIG	Office of Inspector General
OPA	Oil Pollution Act
OSC	On-Scene Coordinator
OSWER	Office of Solid Waste and Emergency Response
RCP	Regional Contingency Plan
RRT	Regional Response Team
USCG	U.S. Coast Guard

Cover photo: August 1, 2010, photo of EPA's research vessel MudPuppy II on Michigan's Morrow Lake as part of EPA's response to the Enbridge oil spill. (EPA photo)

U.S. Environmental Protection Agency
Office of Inspector General

13-P-0152
February 15, 2013

At a Glance

Why We Did This Review

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes federal roles for oil spill response and requires area and regional planning by the U.S. Environmental Protection Agency (EPA) and other stakeholders. A prior audit on the 2010 Deepwater Horizon oil spill in the Gulf of Mexico noted that some contingency plans were out of date. We initiated this review to determine whether the contingency planning structure for responding to oil spills and hazardous substance releases is effective, and whether plans are updated to reflect lessons learned from recent major events and new developments or industry trends.

This report addresses the following EPA Goal or Cross-Cutting Strategy

- *Cleaning up communities and advancing sustainable development*

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/2013/20130215-13-P-0152.pdf

EPA Could Improve Contingency Planning for Oil and Hazardous Substance Response

What We Found

EPA regions have expanded contingency planning by creating additional plans and materials, but regions cannot maintain this large volume of information with their limited resources. Regions have created subarea contingency plans, geographic response plans and strategies, and various web-based tools. This structure exceeds the three levels of plans established in the Oil Pollution Act, which revised the NCP to expand the response system. The NCP requires national planning in the form of an NCP, regional planning by each Regional Response Team in the form of Regional Contingency Plans, and area planning by Area Committees in the form of Area Contingency Plans. Regions developed additional plan materials because regional On-Scene Coordinators find them necessary to respond to incidents. Some written plans miss some NCP requirements, contain duplicative information, and are out-of-date. Technological methods—instead of revising written plans—would enable EPA to maintain current information needed to efficiently respond to spills.

Recommendations and Planned Agency Corrective Actions

We recommend that the Assistant Administrator for Solid Waste and Emergency Response (1) issue guidance to regions on working with their Regional Response Teams and Area Committees to use the most efficient method available to address NCP requirements, (2) require regions to keep critical planning information up-to-date and avoid unnecessary duplication, (3) work through the office's National Response Team capacity to develop a process to regularly incorporate lessons learned from national exercises into contingency plan reviews and updates, and (4) assess the resources necessary to develop and maintain contingency plans and use the results to develop a workforce plan to distribute contingency planning resources. The Agency agreed with our recommendations and plans to address them by the end of fiscal year 2013.

Noteworthy Achievements

EPA regions apply an inclusive approach toward contingency planning by working closely with other federal agencies, states, tribes, and industry representatives. Regions also use technological methods—such as Geographic Information Systems maps, web-based lists, and electronic tools—to address some NCP requirements.

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

THE INSPECTOR GENERAL

February 15, 2013

MEMORANDUM

SUBJECT: EPA Could Improve Contingency Planning for Oil and Hazardous Substance Response
Report No. 13-P-0152

FROM: Arthur A. Elkins Jr.

TO: Mathy Stanislaus
Assistant Administrator for Solid Waste and Emergency Response

This is our report on the subject review 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

Your response to the draft report included proposed corrective actions and completion dates. As such, we are closing this report upon issuance. 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 Melissa Heist, Assistant Inspector General for Audit, at (202) 566-0899 or heist.melissa@epa.gov; or Patrick Gilbride, Director for Risk and Program Performance, at (303) 312-6969 or gilbride.patrick@epa.gov.

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Chapter 1
Introduction

Purpose

On August 25, 2011, the U.S. Environmental Protection Agency (EPA) Office of Inspector General (OIG) issued the report *Revisions Needed to National Contingency Plan Based on Deepwater Horizon Oil Spill* (Report No. 11-P-0534). Our report noted that some contingency plans were out of date at the time of the April 2010 Deepwater Horizon oil spill in the Gulf of Mexico and did not reflect deepwater drilling trends, lessons learned, and past major oil spills. Additionally, the volume of contingency plans made it difficult to determine how plans related to one another and whether they contained duplicative information.

We initiated this review on EPA's contingency planning for emergency response to determine whether the contingency planning structure for responding to oil spills and hazardous substance releases is effective, and whether plans are updated to reflect lessons learned from recent major events and new developments/industry trends, including deepwater drilling.

Background

Oil Spill Contingency Planning Response Authorities

There are a number of laws requiring contingency planning for oil and hazardous substance spills. The Clean Water Act (CWA) established the basic structure for regulating discharges of pollutants into the waters of the United States. CWA Section 311 provides EPA and the U.S. Coast Guard (USCG) with the authority to establish a program for preventing, preparing for, and responding to spills that occur in navigable waters of the United States.

The CWA (formerly called the Federal Water Pollution Control Act) also established requirements for the preparation and publication of the National Contingency Plan (National Oil and Hazardous Substances Pollution Contingency Plan, or NCP). The NCP serves as the federal government's blueprint for responding to oil spills and hazardous substance releases. The NCP outlines the National Response System, which is the mechanism of coordinating response actions by all levels of government. The system is composed of the National Response Team (NRT), Regional Response Teams (RRTs), On-Scene Coordinators (OSCs), Area Committees, state and local governments, and certain vessels and facilities. The NCP describes 5 required elements to be included in an RCP and 10 elements in an ACP. (See appendix A for requirements of RCPs and ACPs.)

Releases of oil and hazardous materials are regulated separately under the Oil Pollution Act (OPA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

- CERCLA, commonly known as Superfund, provided the government with authority to compel persons to clean up releases of hazardous substances for which they are responsible. CERCLA enabled the revision of the NCP to establish procedures and standards for responding to releases of hazardous substances, pollutants, or contaminants.

- The OPA improved the nation's ability to prevent and respond to oil spills by establishing provisions that expanded the federal government's ability, and provided monetary and other resources necessary, to respond to oil spills. The OPA provided new requirements for contingency planning both by government and industry. More specifically, it required the establishment of Area Committees comprised of federal, state, and local governments that made up a spill preparedness and planning body. The OPA also required the NCP to be revised to expand the response system into a three-tiered approach providing additional response requirements for the federal government, as well as additional planning requirements for Area Committees and owners and operators of vessels or certain facilities, such as onshore or offshore buildings, equipment, or pipelines.

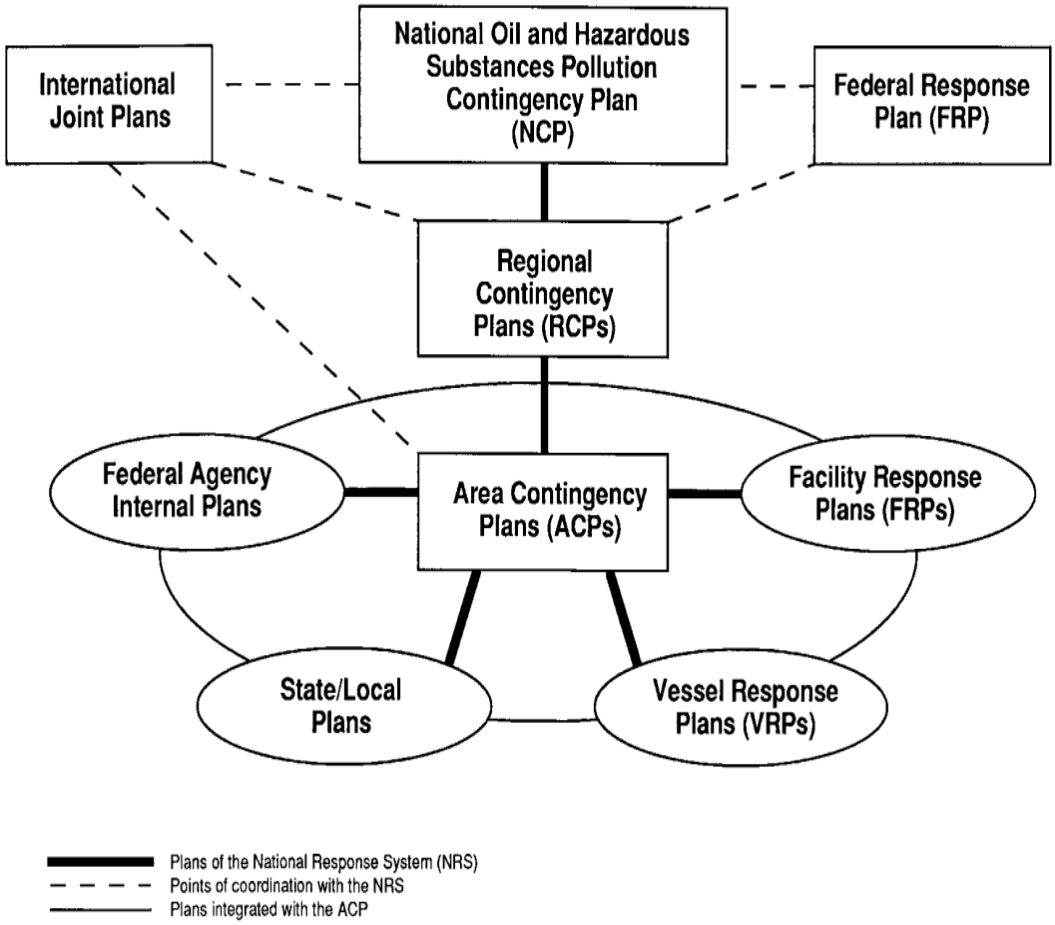
Contingency Planning Requirements

The NCP requires contingency planning at the national, regional, and area levels. There are no specific requirements for updating contingency plans after major events. However, the NCP requires that RRTs "meet at least semiannually to review response actions carried out during the preceding period, consider changes in RCPs, and recommend changes in ACPs." Additionally, the CWA requires Area Committees to periodically update ACPs.

The NCP also outlines facility and vessel response plans that are required by the CWA. Tank facilities, offshore facilities, and onshore facilities that could cause substantial harm to the environment with a discharge into navigable waters must prepare and submit a plan for responding to a worst case discharge or substantial threat of such a discharge. Additionally, the NCP addresses the requirement by local governments to prepare local emergency response plans.

The following figure describes the relationship between the plans.

Figure 1: Relationship of Plans within the NCP



Source: Figure 4 in Section 300.205 of the NCP.

As demonstrated in figure 1, there are various levels of plans with many stakeholders involved at each level, resulting in a complex, interconnected system. The complexity of the contingency planning system necessitates close and continued coordination across agencies and among all levels of government. Additionally, active and effective participation by states is integral to the effective working of this complex National Response System.

EPA's Office of Solid Waste and Emergency Response

EPA's Office of Solid Waste and Emergency Response (OSWER) provides policy, guidance, and direction for the Agency's emergency response and waste programs. Within OSWER, the Office of Emergency Management (OEM) works with other federal partners to prevent accidents as well as to maintain response capabilities. OEM's National Planning and Preparedness Division is responsible for ensuring national EPA readiness to respond to incidents involving hazardous chemicals, oil, and biological/radiological contamination resulting from terrorist attacks or accidents. Each of EPA's 10 regional offices has staff responsible for

oil pollution prevention and emergency response, including OSCs responsible for directing responses to incidents. The NCP requires that an EPA representative chairs the NRT and co-chairs all RRTs in each of the 10 regional offices and Alaska, Oceana, and the Caribbean. Each EPA region we reviewed took a different approach to regional contingency planning depending on the unique needs of the region. In a 1992 Federal Register Notice, EPA's Administrator designated the 13 individual RRTs as the initial Area Committees. As a result, EPA regions have combined their RCPs and ACPs into one planning document.

Noteworthy Achievements

Many EPA regions have taken steps toward providing planning resources to responders using various technological methods. For example:

- Region 5 has developed an Inland Sensitivity Atlas for the entire region available on CD-ROMs using Geographic Information Systems technology. These maps identify information such as sensitive species, natural resources areas, shoreline sensitivity, and boat access ramps. Maps incorporate Geographic Information Systems data from local governments and a Region 5 contingency planner said that they cover about 40 square feet of area at a time. Region 5 response staff stated that these maps are one of the first resources they use when responding to an incident.

- Region 6 has developed two web-based tools—E-Plan and Response Manager—to collect and provide information needed for contingency planning and response to all agencies.

- The Region 10 RRT developed a website that lists all the equipment available within the northwest region. It is updated on an ongoing basis by equipment owners.

Regional emergency management staff and managers in all regions in our review understand that contingency planning is an inclusive process involving many stakeholders. A number of planners and OSCs expressed the importance of outreach during the planning process to provide an effective response to an incident. While all regions do this to an extent, we noted that Region 10 does an exceptional job in incorporating states, locals, and one tribe into its planning process. For example, federal, state, local, and tribal government representatives attend Northwest Area Committee meetings held three times per year.

OEM has also taken steps to address the complexity of the contingency planning structure. OEM is currently in the process of finalizing an "ACP Handbook" as a guide and reference for the development of ACPs.

Scope and Methodology

We performed our review from November 2011 to September 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform our review to obtain sufficient, appropriate evidence to provide a reasonable basis for any findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.

We reviewed laws, regulations, and Agency guidance on contingency planning. We focused our review on EPA Regions 5, 6, 8, and 10 (including Alaska) given their variation in environmental issues, types of emergencies, and corresponding responses. We interviewed EPA staff in headquarters and response staff and planners in each of these regions to understand their approach to contingency planning. We also reviewed a sample of 16 of 38 Subarea Contingency Plans and 3 of 27 Geographic Response Plans in our regions of review. Finally, we reviewed and analyzed various electronic or web-based tools in two of the regions.

Appendix B includes additional details on our scope and methodology.

Chapter 2
Contingency Planning Could Be More Effective

EPA regions have expanded contingency planning by creating additional plans and materials, but regions cannot maintain this large volume of information with their limited funding and personnel. Regions have created subarea contingency plans, geographic response plans and strategies, and various web-based tools. This structure exceeds the three levels of plans established by the OPA, which revised the NCP to expand the response system. The NCP requires national planning in the form of an NCP, regional planning by each RRT in the form of RCPs, and area planning by Area Committees in the form of ACPs. Regions developed additional plan materials because regional OSCs find them necessary to respond to incidents. Some written plans miss some NCP requirements, contain duplicative information, and are out-of-date. Technological methods—instead of revising written plans—would enable EPA to maintain current information needed to efficiently respond to spills.

EPA Regions Expanded Contingency Planning to Include Additional Plans and Technological Tools

The NCP provides the organizational structure and procedures to prepare for and respond to discharges of oil and releases of hazardous substances. The NCP identifies three levels of contingency planning under the National Response System: the NCP, RCPs, and ACPs.

- The NRT is responsible for national planning and coordination and recommends revisions to the NCP to improve effectiveness.
- RRTs are responsible for regional planning and coordination and must develop an RCP for their region to ensure that during an actual incident the roles and responsibilities of federal, state, local, and other responders are clearly defined.
- The federal, state, and local agency members of an Area Committee are responsible for developing an ACP and working with governments and other stakeholders to enhance the contingency planning process.

EPA's contingency planning structure has exceeded the three levels of plans established by the OPA and outlined by the NCP. Regions 5, 6, 8, 10, and Alaska have each taken a different approach to planning. All have one plan that generally serves as a guidance document, typically the RCP-ACP for the region. One regional response manager described the RCP-ACP as "overarching guidance," and another described it as seen at "the 70,000 foot level." Four out of the five regions in our review also have lower-level operational plans in the form of

subarea contingency plans or geographic response plans. These operational plans contain more tactical information in addition to the required RCP and ACP elements and are generally the plans used to respond to an incident. Additionally, all regions in our review have some type of electronic system or database that includes information on contacts, equipment, facilities, and/or sensitive areas that are useful during a response. Table 1 below lists the various plans maintained by each region in our review and shows how each has taken a different approach to planning:

Table 1: Levels and Numbers of Contingency Plans

	Region 5	Region 6	Region 8	Region 10	Alaska
Regional	Federal Region 5 RCP	Regional Integrated Contingency Plan - Interim	Region 8 RCP	Northwest Area Contingency Plan	Alaska Unified Plan
Area		One Gulf Plan and 5 USCG ACPs			
Subarea	19 Subarea Contingency Plans		9 Subarea Contingency Plans		10 Subarea Contingency Plans
Geographic				27 Geographic Response Plans	
Web-based	Inland Sensitivity Atlas (geographic maps for entire region)	Response Manager and E-Plan	Electronic Contact List	Web Based Equipment List and Jurisdictional Boundary Tool	Geographic Response Strategies

Source: EPA OIG summary of contingency plans.

Table 1 demonstrates that all regions have an overarching regional plan to meet NCP requirements for an RCP-ACP. Region 10 and Alaska RRTs incorporate additional requirements into their regional plans. The Northwest Area Contingency Plan contains the Region 10 RCP, 2 USCG ACPs, EPA's Inland ACP, and state plans for Washington and Oregon in one plan for the northwest area. The Alaska Unified Plan combines the RCP and ACP, and includes additional requirements for Alaska's State Master Plan.[1] At the area planning level, the Region 6 RRT maintains the One Gulf Plan, which is an overarching document that contains USCG ACPs and geographic plans for the Gulf region. Regions 5, 8, 10, and Alaska have a number of subarea plans or geographic

[1] The State of Alaska passed legislation in 1980 requiring the Alaska Department of Environmental Conservation to develop, annually review, and revise, as necessary, the State Oil and Hazardous Substance Contingency Plans (State Master Plan and Regional Plans).

response plans that contain more detailed information than regional plans. Finally, all regions have developed web-based planning tools that they use for response.

Regions have expanded their contingency planning structure beyond the three requirements under the NCP because they find the additional materials necessary and useful for a response. Regional response personnel said that developing these materials is often more valuable than a written plan.

- Region 5 developed geographic mapping in the form of an Inland Sensitivity Atlas covering the entire region. A number of Region 5 OSCs stated that mapping is the most important resource for response.

- Region 6 maintains a contact list because responders believe contact information is one of the most important functions to retain for responding to an incident.

- Region 8 developed an OSC phone book for every federal, state, and local representative. A Region 8 OSC stated that contact information on whom to contact during a response is more useful than an actual plan.

- Region 10 has 27 geographic response plans that include tactical information intended to assist responders in the first 24 hours of a spill response. A Region 10 OSC stated that if a spill is located in an area with a geographic response plan it is the first resource they review.

- Alaska has 10 subarea contingency plans that include geographic resources and strategies that provide a platform for incident response.

EPA Regions Cannot Regularly Update and Maintain All Plans Given Limited Resources

Regions have difficulty updating and maintaining the various levels of plans. Operational information, such as equipment lists or contact numbers, can change frequently while policy and guidance in the overarching RCPs-ACPs rarely change. Updating contingency plans, especially RCPs and ACPs, is a time-consuming and costly process. Revisions to RCPs-ACPs take time because an agency must vet changes through the remaining RRT federal agencies and states for review and most RRTs only meet semiannually. It took one region more than a year to update its RCP-ACP. Additionally, one regional OSC estimated that the cost to maintain and exercise plans for their region was a half-million dollars or greater.

Furthermore, regions have limited planning resources—both funding and personnel—to maintain this volume of plans and other tools. Each of EPA's 10 regions has OSCs who have primary planning roles in guiding Area Committees in the development of ACPs. EPA evaluated the distribution of OSCs

in 2001 following the Agency's response to terrorist attacks, and the distribution may not address the planning requirements OSCs have for oil and hazardous substance spills. Regional response and planning staff in all regions we reviewed stated that they do not have enough resources to maintain plans, and that they spread resources to a variety of competing preparedness activities. Moreover, an OEM Director said that EPA never properly funded planning and there are continual budget cuts to the oil program. In its response to our draft report, OSWER provided additional clarification and noted that "funding for area contingency planning is not sufficient to meet its broad based goals and coordination needs." OEM recently established a workgroup to review regional OSC allocations.

The various levels of plans have resulted in a large volume of information that regions cannot regularly update and maintain. As a result, RCPs-ACPs miss some required NCP elements, and some contingency plans are duplicative and out of date.

Missing Requirements in RCPs-ACPs

Appendix A lists required elements for RCPs and ACPs, and we noted the following in the five RCPs-ACPs we reviewed:

- Three were missing a list of equipment, dispersants, or other mitigating substances and devices, as well as personnel available.

- Three did not address areas of economic or environmental importance for the area covered by the RCP-ACP.

- Two did not include detailed worst case discharge information in the public version of the plan for security reasons.

- Two did not discuss procedures for use of volunteers.

While required information may be missing in an RCP-ACP, we found that regions may include it in a different planning mechanism. For example, while three of the five RCPs-ACPs we reviewed did not include detailed information on economic and environmental importance as a part of their geographical location, this information was available in a subarea contingency plan, geographic response plan, or other planning tool. Region 5 includes the environmentally and economically sensitive areas in their Inland Sensitivity Atlas that contains maps using Geographic Information System technology.

Duplicative Information in Plans

In developing the additional plans and planning materials, regions have duplicated some information. For example:

- Both Region 5 and Region 8 have large sections on relationships to other contingency plans and oil spill response, respectively, repeated in multiple sub-area plans.

- Region 6's RCP includes the same information as the NCP, such as responsibilities of the NRT, RRTs, OSCs, and Incident and Unified Commands.

- Much of the information in Alaska's Unified Plan is repetitive from the NCP, such as the listed requirements for ACPs and information on the Unified Command.

- The Region 8 sub-area plans contain contact information but the region also maintains an electronic contact list.

While this provides for some consistency throughout the plans, it may not be necessary to include the same information multiple times; it adds repetitive text to already lengthy planning documents. RCPs-ACPs we reviewed averaged more than 575 pages.

Some Plans Are Out-of-Date

With limited resources for updating plans, regions have not updated some plans for many years. Several subarea contingency plans in Regions 5 and 8, as well as Alaska, are outdated, with some not being updated since the late 1990s.

In addition, we could not determine whether regions updated plans based on lessons learned. One method to evaluate lessons learned is through Spills of National Significance[2] exercises held approximately every 3 years. Table 2 summarizes recommendations raised during three Spills of National Significance exercises preceding the 2010 Deepwater Horizon oil spill,[3] the nation's first actual Spill of National Significance.

[2] Spills of National Significance are designated as such due to their severity, size, location, actual or potential impact on the public health and welfare or the environment, or the complexity of the necessary response effort.
[3] In April 2010, the Deepwater Horizon unit exploded and sank in the Gulf of Mexico. The event lasted 87 days and spilled an estimated 4.9 million barrels of oil, making it the largest marine oil spill in U.S. history.

Table 2: Recommendations from Spills of National Significance Exercises

Spills of National Significance Exercise	Contingency Plan Recommendations
1998 – Prince William Sound and Western Gulf of Alaska	ACPs should incorporate local issues and inform the regional plan holders and responders of the response structure and procedures that will be used.
2004 – California	The current ACP guidance does not include five elements related to Endangered Species Act: wildlife, historical properties, resource identification, fish habitat, and waste management plans.
2007 – Great Lakes and Upper Mississippi/ New Madrid Fault	Review current status of ACPs and RCPs to ensure they are being regularly updated. Many participants and evaluators observed that response plans were not immediately available or used in decisions-making. Informational gaps in response plans were exposed, with latest updates to such plans often not fully disseminated.

Source: Lessons learned and after action reports from USCG and EPA.

Similar issues and recommendations raised from the past three Spills of National Significance exercises came to fruition during the Deepwater Horizon spill. For example, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling recommended that EPA and USCG bolster state and local involvement in oil spill contingency planning and create a mechanism for local involvement in spill planning and response. This recommendation is similar to the recommendation that arose in the 1998 exercise, yet we could not determine whether this recommendation was implemented in plans prior to the 2010 Deepwater Horizon spill. In its response to our draft report, OSWER noted that the 1998 exercise in Alaska represented a totally different scenario (ice) than the Deepwater Horizon spill (warm weather/water). While we agree with OSWER that some of the recommendations from the Alaska exercise would not translate to the Deepwater Horizon spill, the recommendation we noted in Table 2 on contingency planning was generic in nature and should be considered nationally. If applied, knowledge gained from major spills and these exercises can improve preparedness.

EPA Could Use Technology to Streamline Contingency Planning

Most of the regions we reviewed already have or are in the process of moving toward maintaining plan requirements and other response information using technological methods, as Region 5 has done with its geographical mapping. Other examples include:

- Region 6 developed two response tools—E-Plan and Response Manager—to collect and provide information needed for contingency planning and response. These searchable databases collate information from multiple sources. E-Plan focuses on chemicals and Response Manager focuses on facilities and response data.

- The Region 10 RRT developed a website that lists all equipment available within the northwest region. It is updated on an ongoing basis and maintained by all equipment owners.

Regions can use these technological methods to keep information more current rather than in lengthy, written plans. Additionally, regions can update lower-level, tactical information as needed without having to vet changes through the 15 RRT federal agencies for approval, as necessary for making changes to an RCP-ACP.

All regions stated that using technology or web-based planning could help streamline the contingency planning process. Furthermore, several regional contingency planning personnel said that the process of planning is often more important than the plan itself. Planning is inclusive of many players—federal, state, and local—and regional OSCs and planners expressed the importance of outreach to build relationships with these groups. Using technological methods to streamline contingency planning would allow regions to focus on aspects of planning and preparedness that are most important to them.

Conclusion

EPA expanded contingency plans beyond the three levels of plans established by the OPA and outlined by the NCP because regional response staff said additional plans are necessary and useful for responding to incidents. However, this has resulted in a large volume of information that regions cannot regularly update and maintain with their limited resources. EPA could more efficiently address some NCP requirements by using technological tools rather than by updating or revising written plans. The NCP—most recently revised in 1994—does not incorporate improved technological methods for data collection and information delivery. The concept of a written plan could become obsolete when better technological methods, such as web databases, serve as more efficient methods for information delivery. Regions have already taken steps to use technological methods and acknowledged that they could make contingency planning more efficient. EPA could make it easier for regions to maintain current, complete, and accurate information by investing in technology and using the most effective information retention and delivery method as a single source to address the NCP requirements.

Recommendations

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

1. Issue guidance to regions on working with their RRTs and Area Committees to use the most efficient method available to collect, maintain, and deliver RCP/ACP-required elements outlined in the NCP, which may mean using technological tools in lieu of written plans.

2. Require regions to keep critical planning information up to date using the most effective method available and avoid unnecessary duplication.

3. Have the Director of OEM work through the office's NRT capacity to develop a process to regularly incorporate lessons learned from national exercises into contingency plan reviews and updates.

4. Assess the resources, including OSCs, necessary to develop and maintain contingency plans. Use the results of this analysis to develop a workforce plan to distribute contingency planning resources.

Agency Comments and OIG Evaluation

OSWER generally agreed with our report recommendations and indicated that the recommendations parallel efforts OSWER is undertaking. OSWER's response noted two key obstacles that must be overcome before successful implementation of planned corrective actions can be achieved: limited involvement by other agencies and stakeholders, and limited resources. OSWER's response noted that, as the designated lead for inland areas, EPA must ensure compatibility with USCG-led plans for coastal zones. While OSWER's response stated that "EPA strives to ensure high quality contingency plans," the Agency "is limited in its authority to require other agencies to update their critical planning information.

We made minor revisions to our final report text, as appropriate, based on OSWER's responses, including revising our third recommendation after additional correspondence with OSWER. Appendix C contains the Agency's full responses to our draft report and planned actions by OSWER to address our recommendations. We believe that OSWER's planned actions address the intent of our recommendations. Our recommendations remain open pending the completion of planned 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	12	Issue guidance to regions on working with their RRTs and Area Committees to use the most efficient method available to collect, maintain, and deliver RCP/ACP-required elements outlined in the NCP, which may mean using technological tools in lieu of written plans.	O	Assistant Administrator for Solid Waste and Emergency Response	09/30/13		
2	13	Require regions to keep critical planning information up to date using the most effective method available and avoid unnecessary duplication.	O	Assistant Administrator for Solid Waste and Emergency Response	09/30/13		
3	13	Have the Director of OEM work through the office's NRT capacity to develop a process to regularly incorporate lessons learned from national exercises into contingency plan reviews and updates.	O	Assistant Administrator for Solid Waste and Emergency Response	05/31/13		
4	13	Assess the resources, including OSCs, necessary to develop and maintain contingency plans. Use the results of this analysis to develop a workforce plan to distribute contingency planning resources.	O	Assistant Administrator for Solid Waste and Emergency Response	09/30/13		

[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

NCP Requirements for RCPs and ACPs

Table 3: RCP and ACP Requirements

RCPs shall:	
1.	Include all useful facilities and resources in the region, from government, commercial, academic, and other sources.
2.	Follow the format of the NCP.
3.	Be coordinated with state emergency response plans, ACPs, and Title III local emergency response plans.
4.	Include lines of demarcation between the inland and coastal zones, as mutually agreed upon by USCG and EPA.
5.	Specify detailed criteria for activation of RRTs.
ACPs shall:	
1.	Be adequate to remove a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near the area.
2.	Provide for a well-coordinated response that is integrated and compatible with all appropriate response plans of state, local, and non-federal entities, and especially with Title III local emergency response plans.
3.	Include a description of the area covered by the plan, including the areas of special economic or environmental importance that might be damaged by a discharge.
4.	Include a detailed description of the responsibilities of an owner or operator and of federal, state, and local agencies in removing a discharge, and in mitigating or preventing a substantial threat of a discharge.
5.	Include a list of equipment, dispersants, or other mitigating substances and devices, and personnel available.
6.	Include a description of procedures to be followed for obtaining an expedited decision regarding the use of dispersants.
7.	Include a detailed description of how the plan is integrated into other ACPs and tank vessel, offshore facility, and onshore facility response plans.
8.	Establish procedures to allow for well organized, worthwhile, and safe use of volunteers.
9.	Include a Fish and Wildlife and Sensitive Environments Plan in an annex (this annex has 13 requirements).
10.	Incorporate technical and scientific information and strategies where effective standard techniques are unavailable.

Source: EPA OIG review of NCP.

Details on Scope and Methodology

We conducted our review to determine whether the contingency planning structure for responding to oil spills and hazardous substance releases is effective. By "structure" we considered the various levels of plans and other planning materials in each region, how they fit together, and how regions utilize them during responses to incidents.

We chose a sample of EPA regions to focus our review: Regions 5, 6, 8, and 10 (including Alaska). All of these regions have varying types of environments and potential types of emergencies and corresponding responses. We chose Region 5 due to the Enbridge pipeline spill in July 2010 near Marshall, Michigan. The release, estimated at 819,000 gallons, entered Talmadge Creek and flowed into the Kalamazoo River, a Lake Michigan tributary. We included Region 6 because of the region's history of oil spills and our familiarity with Region 6 plans based on our audit of dispersant use in the 2010 Deepwater Horizon oil spill. We chose Region 8 due to the media and political attention of the TransCanada Keystone pipeline. Region 8 is a contrast to other regions as it is a totally inland zone where EPA has response authority for the entire region. We included Region 10 because it has extensive oil production in deepwater in both the Pacific and Arctic Oceans as well as onshore.

To address our objective, we reviewed laws and regulations on contingency planning, including:

- CWA
- CERLCA
- Emergency Planning and Community Right-to-Know Act
- Executive Order 12777, *Implementation of Section 311 of the Federal Water Pollution Control Act of October 18, 1972, as amended, and the Oil Pollution Act of 1990*
- Executive Order 13580, *Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska*
- Executive Order 13547, *Stewardship of the Ocean, Our Coasts, and the Great Lakes*
- NCP
- OPA
- Spill Prevention Control and Countermeasure Rule

To understand EPA's approach to contingency planning and how different plans are used in a response, we conducted interviews with:

- Staff in EPA headquarters, including the OEM Director, OEM Deputy Director, OEM National Planning and Preparedness Director, and the Executive Director of the NRT
- RRT co-chairs, planners, and OSCs in Regions 5, 6, 8, 10 and Alaska

To gain perspectives of those outside the Agency, we interviewed contingency planning staff in:

- USCG
- U.S. Department of the Interior
- U.S. Department of Transportation
- States of Alaska, Texas, Utah, and Washington

Regions 5, 6, 8, 10, and Alaska all have several levels of contingency plans and other response resources. We reviewed regional RCPs and ACPs to determine whether they met the requirements under the NCP. We also reviewed a sample of other contingency plans to determine how regions use various plans in a response and how they relate to each other. Table 4 shows the various levels of plans in each region, and red font denotes those we reviewed.

Table 4: Levels and Numbers of Contingency Plans in Regions Reviewed

	Region 5	Region 6	Region 8	Region 10	Alaska
ACPs and RCPs[4]	RCP-ACP	RCP-ACP One Gulf Plan	RCP-ACP	Northwest ACP (RCP-ACP)	Alaska Unified Plan (RCP-ACP)
Sub-ACPs	19 (7)		9 (7)		10 (2)
Geographic Response Plans				27 (3)	
Electronic or Web-Based Tools	Geographic Mapping for the Region	Response Manager and E-Plan	Electronic Contact List	Equipment List	9 Geographic Response Strategies

Source: EPA-OIG summary of contingency plans and response resources.

Prior Audit Coverage

In April 2010, the Deepwater Horizon unit operated by BP exploded and sank in the Gulf of Mexico. The event lasted 87 days and spilled an estimated 4.9 million barrels of oil, making it the largest marine oil spill in U.S. history. The OIG reviewed EPA's role in the use of dispersants during the spill and issued the report *Revisions Needed to National Contingency Plan Based on Deepwater Horizon Oil Spill* (Report No. 11-P-0534) on August 25, 2011. We found that contingency plans were out of date at the time of the spill and were not updated to reflect deepwater drilling trends, lessons learned, and past major oil spills. We recommended that OEM work through its NRT capacity to establish a policy for periodic reviews and updates to contingency plans after considering lessons learned from major national and international oil spills and/or based on area trends in oil drilling. OSWER agreed with this recommendation. OSWER is working with the NRT on a framework for plan reviews and updates in light of lessons learned from the Deepwater Horizon spill, and anticipates completing the framework by March 31, 2013.

Additionally, our office issued the report *EPA Should Continue to Improve Its National Emergency Response Planning* (Report No. 08-P-0055) on January 9, 2008. This report evaluated EPA's Response Business Plan and found that it did not satisfy EPA's need for a framework to respond to incidents of national significance. The report recommended that EPA revise the plan to incorporate the methodology and assumptions used to develop all personnel and resource estimates, the rational for the selection of the incidents of national significance, lessons learned from past incidents, logistics of resource deployment, and risk communications. EPA concurred with the recommendations.

[4] All regions in our review have combined their RCPs and ACPs due to a 1992 Federal Register notice that combined RRTs and Area Committees.

Agency Response to the Draft Report

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

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

December 10, 2012

MEMORANDUM

SUBJECT: Response to OIG's draft report: "EPA Could Improve Contingency Planning for Oil and Hazardous Substance Emergency Response." Assignment No. OA-FY12-0084

FROM: Mathy Stanislaus /s/
Assistant Administrator

TO: Melissa M. Heist
Assistant Inspector General for Audit

Thank you for the opportunity to respond to the issues and recommendations in the subject audit report. Following is a summary of the agency's overall views, along with its views on each of the report recommendations. The agency agrees with the report recommendations which generally parallel efforts we have been addressing. Accordingly, we have provided high-level intended corrective actions and estimated completion dates. For your consideration, we have included a Technical Comments Attachment to supplement this response.

AGENCY'S OVERALL VIEWS

In response to the OIG's Draft Report, **"**EPA Could Improve Contingency Planning for Oil and Hazardous Substance Emergency Response," EPA generally agrees with the recommendations in this report. Area contingency planning is a coordinated effort among twenty or more federal, state, local and tribal agencies; even prior to the passage of the Oil Pollution Act of 1990 (OPA 90), EPA worked on area planning, as contingency planning pre-dates OPA 90. EPA works very closely with the U.S. Coast Guard (USCG), the designated lead agency for planning and response in coastal zones and certain major inland water bodies. [5] EPA is the designated lead agency for inland areas. [6] EPA-lead inland plans covering areas adjacent to the coastal zone must ensure compatibility with USCG-lead plans for those

[5] April 24, 1992 Federal Register Notice (57 FR 15198): Designation of Areas and Area Committees Under the Oil Pollution Act of 1990.

[6] Through Executive Order 12777 (56 FR 54757; October 22, 1991), the President delegated to EPA the responsibility for designating the areas and appointing the committees for the "inland zone". Under the CWA, ACPs are developed by Area Committees under the direction of the FOSC for their area.

zones. In this leadership role, EPA strives to ensure high quality contingency plans for each Area Contingency Plan (ACP), to meet the requirements of OPA 90 and the National Oil and Hazardous Substances Pollution Contingency Plan (or, "National Contingency Plan" (NCP)). However, with so many other agencies also active participants and contributors to the planning process, EPA is limited in its authority to require other agencies to update their critical planning information.

Thus, although we generally agree with the recommendations in this report, and they parallel our efforts, two key obstacles, (i.e., limited involvement by other agencies and stakeholders and resources) must be overcome for their successful implementation. New incident response techniques, policy changes, technological innovations and the work to incorporate lessons learned into area plans makes this a continuously improving process and completion very difficult. Thus, EPA is dependent on future years' resources to sustain and expand its current area planning commitments.

In addition, there are three areas of the report that need clarification. The first, on page 4 of the report, in the background discussion of EPA's Office of Solid Waste and Emergency Response, the drafters state that, "[e]ach EPA region we reviewed has taken a different approach to regional contingency planning." It is important to emphasize that regions need to take a tailored approach to regional contingency planning in order to meet the unique needs of their region. Because area plans are focused on specific geographic domains, with many physical and jurisdictional variables, there can be no "one size fits all" plan format. EPA's OSWER/OEM does ensure national consistency to the extent possible.

Secondly, on page 9 of the report under the heading, "EPA Regions Cannot Regularly Update and Maintain All Plans Given Limited Resources," the report attributes to "an OEM Director," that, "EPA never properly funded planning and there are continual budget cuts to the oil program." This statement is generalized to "planning" where it is more specific to "area contingency planning." Therefore, a more accurate characterization would be that, "funding for area contingency planning is not sufficient to meet its broad based goals and coordination needs"

Finally, on page 11 of the report, under the heading, "Some Plans are Out-of-Date," we would like to address the statement that it could not be determined that recommendations that arose in the 1998 exercise (Prince William Sound and Western Gulf of Alaska) were implemented in plans prior to the 2010 Deepwater Horizon (DWH) spill and that "[i]f applied, knowledge gained from major spills and these exercises can improve preparedness." EPA continuously incorporates local issues and informs its regional plan holders and responders of the response structure and procedures that result from lessons learned from Spills of National Significance (SONS) exercises and real world spills in order to improve preparedness; however, lessons learned in the 1998 exercise in AK represent a totally different scenario (ice) than the real world DWH (warm weather/water) spill. Thus the majority of lessons learned from the 1998 AK exercise would not translate to the DWH spill. Furthermore, to maximize existing regional resources and to comply with the mandated area contingency planning requirements, regional area planners are not mostly composed of OSCs. Although, the On-Scene Coordinators (OSCs) are the personnel mandated by OPA 90 and the NCP to work on ACPs & Area Committees (ACs), other personnel participate as well.

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY
1	Issue guidance to regions on working with their RRTs and Area Committees (ACs) to use the most efficient method available to collect, maintain, and deliver RCP/ACP required elements outlined in the NCP, which may mean using technological tools in lieu of written plans.	OEM will clarify in the revisions already underway for the ACP Handbook and provide the updated ACP Handbook (guidance) to regions.	4th Quarter of FY 2013
2	Require regions to keep critical planning information up to date using the most effective method available and avoid unnecessary duplication.	2.1 OEM will inform regional offices to avoid unnecessary duplication through the ACP Handbook (guidance).	4th Quarter FY 2013
		2.2 OSWER/OEM will issue guidance and work with the Regions on its timely implementation.	4th Quarter FY 2016, and continuing
3	Have the Director of OEM work through the office's NRT capacity to incorporate lessons learned from national exercises in the forthcoming NRT policy on periodic contingency plan reviews and updates.	The NRT will continue to incorporate lessons learned from exercises and real world events into its purview.	On-going
4	Assess the resources, including OSCs, necessary to develop and maintain contingency plans. Use the results of this analysis to develop a workforce plan to distribute contingency planning resources.	Building on the existing workgroup process, continue evaluation of OSC resources based on needs and responsibilities of the regions to develop the plan to redistribute regional OSC allocations.	Recommendation from workgroup by end of 4th quarter FY2013.

Disagreements

OEM has noted above our concerns with some of the language and provided qualifiers to address the fact that EPA is limited in its authority to require other agencies to update their critical planning information.

Thank you for the opportunity to respond to your final findings paper. Should you have any questions regarding this memo, please contact Dana Tulis, Deputy Director, Office of Emergency Management at 202-564-8600.

Attachment

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

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

February 8, 2013

EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Follow-up Response to OIG draft report: "EPA Could Improve Contingency Planning for Oil and Hazardous Substance Emergency Response: Assignment No. OA-FY12-0084

FROM: Mathy Stanislaus
Assistant Administrator

TO: Melissa M. Heist
Assistant Inspector General for Audit

We concur with the revised recommendation number 3 as stated below and provide our response to the recommendation.

OIG Revised Recommendation

Have the Director of OEM work through the office's NRT capacity to develop a process to regularly incorporate lessons learned from national exercises into contingency plan reviews and updates.

OSWER Response

The NRT and RRTs have existing procedures to encourage and ensure that lessons learned from responses and exercises are incorporated into contingency plan improvements. The NCP requires the RRTs to "...review response actions carried out during the preceding period, consider changes to the RCPs, and recommend changes to the ACPs." This process has carried over to experiences gained through large-scale exercises. In addition to the regular RRT meetings, the annual NRT/RRT Co-Chairs meeting has a standing agenda item to discuss the prior year responses and exercises, lessons learned, and how those lessons will improve contingency plans. The next such national meeting is scheduled for April 2013, and this will be on the agenda. The NRT will also ensure that this agenda item is on the agenda for all annual NRT/RRT Co-Chairs meeting; the next such meeting will likely be planned for Spring 2014.

Further, as one example/demonstration of a specific NRT guidance document that resulted from a lesson learned (in this case from the Deepwater Horizon oil spill response), OEM will finalize the National Response Team's Atypical Dispersant Guidance. This document has been drafted and it is currently under review by the NRT member agencies. The planned date of completion of this guidance is 5/31/13.

If you have any questions, please contact Johnsie Webster, OSWER Audit Coordinator, at (202) 566-1912.

Distribution

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