



U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF INSPECTOR GENERAL

*Catalyst for Improving the Environment*

# EPA Should Clarify and Strengthen Its Waste Management Oversight Role With Respect to Oil Spills of National Significance

Report No. 11-P-0706

September 26, 2011



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## Abbreviations

ACP	Area Contingency Plans
E&P	Exploration and production
EPA	U.S. Environmental Protection Agency
FOSC	Federal on-scene coordinator
NCP	National Contingency Plan
NRF	National Response Framework
OIG	Office of Inspector General
OSC	On-scene coordinator
OSWER	Office of Solid Waste and Emergency Response
POTW	Publicly owned treatment works
RCRA	Resource Conservation and Recovery Act
UAC	Unified Area Command
UIC	Underground injection control

**Cover photos:** *From left:* Oil collected in plastic bags and put into containers for landfill disposal; decontamination area and pressure washers at the Bayou Chico Decontamination Area in Pensacola, Florida. (EPA photos)

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# At a Glance

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## Why We Did This Review

The Office of Inspector General (OIG) evaluated the effectiveness of the U.S. Environmental Protection Agency's (EPA's) oversight of the Gulf Coast oil spill waste management plans and activities. Our objective was to determine whether the plans and activities for tracking and transporting oil-contaminated waste effectively provided a full accounting of the volume and disposition of waste.

## Background

On April 20, 2010, Deepwater Horizon, an offshore rig drilling oil for the BP America Production Company, exploded approximately 50 miles off the coast of Louisiana, causing large quantities of oil to spill into the Gulf of Mexico. As of June 19, 2011, over 626 million pounds of waste from the spill had been disposed of on land.

**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/2011/20110926-11-P-0706.pdf](http://www.epa.gov/oig/reports/2011/20110926-11-P-0706.pdf)

## ***EPA Should Clarify and Strengthen Its Waste Management Oversight Role With Respect to Oil Spills of National Significance***

### **What We Found**

As a support agency to the Coast Guard, EPA's oversight of the Gulf Coast oil spill waste management activities provided assurance that oil-contaminated waste was disposed of properly. EPA helped shape the federal government's requirements for BP's waste management activities during the Gulf Coast oil spill. EPA had a key role in reviewing and approving BP's waste management plans. EPA also conducted assessments of landfills to ensure that waste could be safely disposed, independently sampled waste, and kept the public informed about its oversight activities and results. The Gulf Coast oil spill was the first to be designated a "Spill of National Significance," and as such, the increased federal oversight of BP's waste management activities increased transparency and provided additional measures to protect the environment and public health.

EPA can be better prepared to respond to future Spills of National Significance. At the time of the spill, EPA did not have adequate waste management guidance for a spill of this magnitude in place. In part, this was due to limitations in the oil spill response regulations, which do not specifically address Spills of National Significance, as well as incomplete response plans. EPA fell short of its own goals for waste management oversight and did not conduct oversight for all states and facilities that received waste. In addition, EPA's lack of planning and transparency on its decision to manage the oil spill waste in a manner different than provided by guidance resulted in staff confusion, frustration, and inefficiency. Although we obtained no evidence that there were negative effects from these limitations, some delay in the disposal of the waste did occur.

### **What We Recommend**

We recommend that EPA, using lessons learned in response to this spill: work with other federal partners to determine whether the National Contingency Plan and National Response Framework for waste management oversight and roles should be updated; complete waste management guidance in Area Contingency Plans; develop a model waste management plan; and, to the extent needed, seek additional authorities to perform waste management oversight in offshore Spills of National Significance. We also recommend that EPA update the 2002 guidance on the oil and gas exploration and production waste exemption. EPA has taken action on some recommendations, disagreed with others, and will need to fully respond to other recommendations in its final response to this report. We revised recommendations 1 and 3 in response to Agency comments. These recommendations are unresolved with resolution efforts in progress.



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

THE INSPECTOR GENERAL

September 26, 2011

**MEMORANDUM**

**SUBJECT:** EPA Should Clarify and Strengthen Its Waste Management Oversight Role With Respect to Oil Spills of National Significance  
Report No. 11-P-0706

**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 of the Inspector General.

**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 resolution procedures.

The estimated direct labor and travel costs for this report are \$309,366.

**Action Required**

We defer to the Agency on recommendation 2. The recommendation is in a closed status for reporting purposes; therefore, you do not need to respond further regarding this recommendation. The Agency disagreed with recommendations 1.a. and 3—which were revised in response to Agency comments—and did not provide a clear statement of agreement or disagreement with recommendation 1.b. The Agency provided an acceptable corrective action plan for recommendation 1.c., but did not provide milestone dates or a planned completion date. Recommendations 1 and 3 are unresolved with resolution efforts in progress. Therefore, in accordance with EPA Manual 2750 regarding unresolved recommendations, you are required to provide a written response to recommendations 1 and 3, including a proposed corrective action plan for agreed-to recommendations or proposed alternative actions for recommendations 1.a.,

1.b., and 3, and a planned completion date for recommendation 1.c., within 90 calendar days of the report date.

Your response will be posted on the OIG's public website, along with our memorandum commenting on the response. The 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. Please e-mail your response to Carolyn Copper at [copper.carolyn@epa.gov](mailto:copper.carolyn@epa.gov). The final response should not contain data that should not be released to the public; if the response contains such data, the data for redaction or removal should be identified. 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 Wade Najjum at (202) 566-0827 or [najjum.wade@epa.gov](mailto:najjum.wade@epa.gov), or Carolyn Copper at (202) 566-0829 or [copper.carolyn@epa.gov](mailto:copper.carolyn@epa.gov).

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# Chapter 1

## Introduction

### Purpose

The purpose of this review was to evaluate the effectiveness of U.S. Environmental Protection Agency (EPA) oversight of BP America Production Company's waste management plans and activities during the Gulf Coast oil spill. Our objective was to determine whether plans and activities for tracking and transporting oil-contaminated waste effectively provided a full accounting of the volume and disposition of waste.

### Background

On April 20, 2010, Deepwater Horizon, an offshore rig drilling oil for BP, exploded approximately 50 miles off the coast of Louisiana. The explosion and fire on the rig sank Deepwater Horizon and damaged the oil wellhead. The rig's damaged oil wellhead was fitted with a blowout preventer; however, it failed to function properly. On April 24, the first leaks from the well were reported. Large quantities of oil began spilling into the Gulf of Mexico, leading the U.S. Department of Homeland Security to designate the event as the first "Spill of National Significance" on April 29. One week later, on May 7, oil was discovered on the Louisiana shoreline; oil would later appear on the coasts of Alabama, Florida, Mississippi, and, to a lesser extent, Texas. By the time the damaged oil wellhead was capped on July 15, an estimated 4.9 million barrels<sup>1</sup> of oil had been released into the Gulf of Mexico.

### ***Waste Streams and Disposal***

The response effort generated a number of different waste streams. These included oil and water mixtures, tar balls, oiled vegetation and debris, and oiled response equipment such as oiled boom and safety gear used by response workers.<sup>2</sup> After being collected from cleanup operations, waste was sent to transfer locations, also known as staging areas, operated by BP contractors in Louisiana, Alabama, Mississippi, Florida, and Texas. Liquid oil waste was placed in underground injection control (UIC) wells, sent for reuse or disposed of in publicly owned treatment works (POTW) facilities. Waste material in solid form was either sent to landfills for disposal or, to a lesser extent, recycled. Figure 1

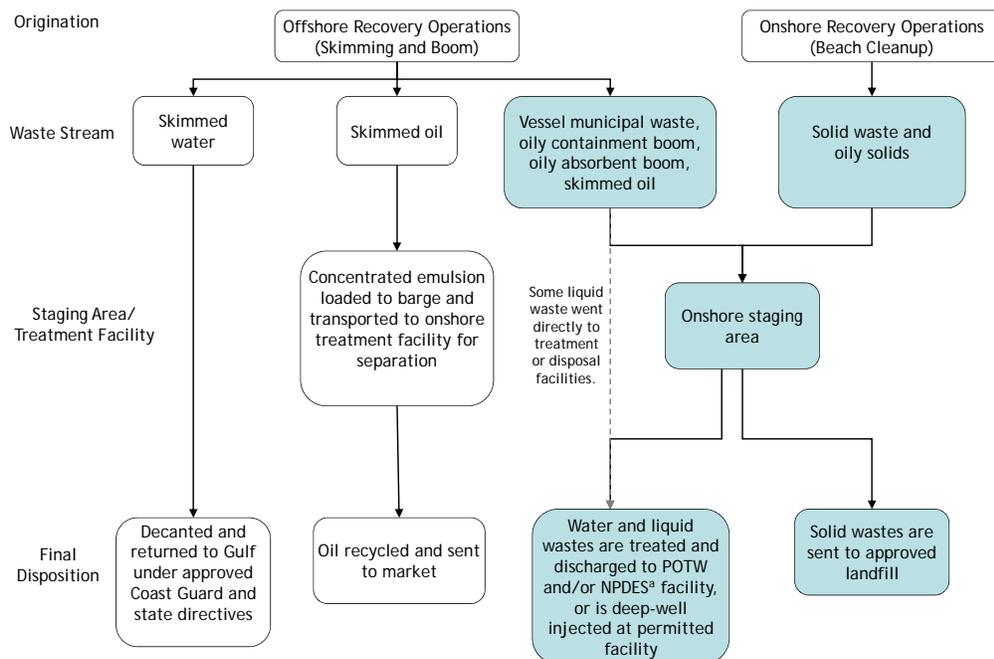
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<sup>1</sup> Estimated by the Flow Rate Technical Group and the Department of Energy and cited in *Oil Budget Calculator: Deepwater Horizon*, November 2010, <http://www.restorethegulf.gov>. The Office of Solid Waste and Emergency Response has indicated that there is an ongoing investigation into the number of barrels spilled.

<sup>2</sup> The oil spill waste stream also included animal carcasses. The U.S. Fish and Wildlife Service and/or state fish and wildlife agencies were responsible for collecting and counting animal carcasses recovered during the oil spill response.

shows the flow of oil spill waste and materials from the point of origin to final disposition, with the scope of this Office of Inspector General (OIG) evaluation shown in blue.

**Figure 1: Solid and liquid oil spill waste flow**



Source: OIG analysis of Unified Area Command Gulf-Wide Recovered Oil/Waste Management Plan, 2010.

<sup>a</sup> National Pollutant Discharge Elimination System

The amount of waste collected on a monthly basis generally began to decline after October 2010. Waste from the oil spill continues to be collected and as of June 19, 2011, more than 626 million pounds of waste had been disposed of on land.<sup>3</sup> The volume of this waste could have filled 83.2 football fields 3 feet deep. The bulk of this waste was collected in Louisiana and Alabama.

Unadulterated crude-oil-contaminated waste from the Gulf Coast oil spill was exempted from Resource Conservation and Recovery Act (RCRA) Subtitle C federal hazardous waste regulations under a 1988 regulatory determination.<sup>4</sup> This exemption is referred to as the oil and gas exploration and production (E&P) waste exemption, and it applies to wastes derived from primary oil E&P

<sup>3</sup> This amount and other oil waste totals in this report do not include animal carcasses, oil burned off the surface of the water, oil that dispersed from the spill site, or any other oil spilled that was not collected and brought to land for disposal.

<sup>4</sup> Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes, 53 Fed. Reg. 25446–25454 (July 6, 1988).

operations (as opposed to transportation and manufacturing operations). As a result of EPA's determination, solid wastes that meet the E&P exemption from federal hazardous waste regulations are regulated as nonhazardous solid waste, predominantly by state and local governments. EPA does not typically become directly involved in the management or oversight of solid wastes, including E&P waste disposal. An EPA guidance document titled *Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazardous Waste Regulations*, issued in 2002, provides information on how to determine whether a solid waste is covered by the E&P exemption, examples of wastes that are covered and not covered by the E&P exemption, and clarifications on misunderstandings about the E&P exemption.

### ***Oil Spill Response Guidance and Procedures***

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) provides federal agencies with the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. The National Response Team, chaired by EPA and composed of multiple federal agencies, may propose changes to the NCP to improve the effectiveness of the national response system. The NCP designates EPA and Coast Guard roles and responsibilities. The Director for the Office of Emergency Management serves as EPA's representative/chair to the National Response Team; the Coast Guard serves as vice-chair<sup>5</sup>. Developed by Area Committees, Area Contingency Plans (ACPs) contain location-specific procedures for responding to discharges and are implemented in conjunction with the NCP and the Regional Contingency Plan. The ACPs are reviewed by Regional Response Teams.

The NCP outlines several waste management guidelines that ACPs should address, including:

- The sampling, testing, and classifying of recovered oil and oiled debris
- The segregation, temporary storage, and stockpiling of recovered oil and oiled debris
- Prior state disposal approvals and permits
- The routes, methods, and sites for the disposal of collected oil, oiled debris, and animal carcasses
- Procedures for obtaining waivers, exemptions, or authorizations associated with handling or transporting waste materials

In addition, per the NCP, ACPs may also contain a hierarchy of preferences for disposal alternatives, with recycling (reprocessing) being the most preferred, and

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<sup>5</sup> During response actions, however, the chair of the National Response Team is provided by the agency that provides the on-scene coordinator. Therefore, during the Gulf Coast oil spill response, the Coast Guard provided both the federal on-scene coordinator (see page 4) and the chair for the National Response Team.

what disposal requirements are mandatory or may not be waived during the response.

The National Response Framework (NRF), developed by the U.S. Department of Homeland Security, with input from federal partners and other stakeholders, provides principles that enable response partners to prepare for and provide a unified national response to domestic incidents. Under the Oil and Hazardous Materials Response Annex (Emergency Support Function #10), the NRF includes actions to prepare for and respond to oil and other hazardous materials discharges. These actions are consistent with those outlined in the NCP, which is an “operational supplement” to the NRF.<sup>6</sup>

### ***BP and Federal Government Roles in Cleanup***

The U.S. Coast Guard National Pollution Fund Center, responsible for administering the Oil Spill Liability Trust Fund, designated two BP subsidiaries and five other companies as responsible parties for Gulf Coast oil-spill-related claims, including costs the government incurred associated with the spill response and cleanup. The NCP designates the Coast Guard as the lead response agency for spills within or threatening coastal zones, whereas EPA leads the response to spills that occur in inland zones. Under RCRA, EPA has the authority to mandate cleanup activities in cases of imminent and substantial danger to the environment or public health. During this response, however, EPA saw no need to invoke this authority.

The Coast Guard established a federal on-scene coordinator (FOSC)<sup>7</sup> to lead the Unified Area Command (UAC), whose members included EPA, other federal agencies, and BP. The BP Unified Area Commander served as the responsible party’s counterpart to the FOSC. The Coast Guard, as the lead agency of the response, and EPA, as a support agency, provided oversight and assistance to BP to ensure timely and protective oil spill waste management.

To provide oversight of BP’s waste management activities, in June 2010, the Coast Guard, with EPA concurrence, issued waste management directives to BP. These directives required BP to submit waste management plans and certain deliverables to be approved by the Coast Guard, and to report information on the amount and characteristics of the waste on BP’s website. The directives also required BP to allow EPA access to facilities where waste would be stored or disposed of, so that EPA could oversee waste management activities. According to the EPA Administrator, the directives created “enforceable requirements, implementation procedures, and oversight plans related to BP’s handling of waste

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<sup>6</sup> “Emergency Support Function #10–Oil and Hazardous Materials Response Annex,” January 2008, p. 2, <http://www.fema.gov>.

<sup>7</sup> An FOSC is a predesignated federal official, in this case the Coast Guard, who oversees the oil spill response effort. The FOSC is responsible for providing access to federal resources, providing technical assistance, and coordinating the efforts of federal, local, and private parties.

materials.”<sup>8</sup> Also in June 2010, the Coast Guard, EPA, and the involved states approved BP’s waste management plans for Louisiana, and the combined plan for Alabama, Mississippi, and Florida. In October 2010, BP’s final waste management plan, which covered all affected states and allowed for some state-specific management activities, was approved by the federal and state oversight agencies.

## Noteworthy Achievements

During the Gulf Coast oil spill and response, EPA, as a support agency to the Coast Guard, worked to ensure that its federal presence was apparent and its response activities, as well as BP’s waste management activities, were transparent. EPA’s efforts to accomplish these goals included reviewing waste management plans, planning and conducting visits to staging areas and landfills, reviewing waste reports, sampling waste for hazardous characteristics, and creating a special section on its website for the Gulf Coast oil spill response.<sup>9</sup> The waste management page of EPA’s website included the waste management plans, the waste management directives, site visit plan and results, and EPA’s waste sampling strategy and results.

## Scope and Methodology

We conducted our review 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. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our evaluation objectives. We performed our review from November 2010 to July 2011.

We conducted our review at EPA headquarters and in Regions 4 and 6. Region 4 includes Alabama, Florida, and Mississippi, and Region 6 includes Louisiana and Texas. These regions were involved in planning and implementing waste management oversight in response to the oil spill. We interviewed staff at all levels of the response, including headquarters senior staff and an official in the Office of Solid Waste and Emergency Response (OSWER), senior staff in the Office of General Counsel, and staff in the Office of Enforcement and Compliance Assurance. In the regions, we interviewed on-scene coordinators (OSCs), Response Support Corps members, and RCRA staff, and in Region 6, we interviewed staff from the regional Office of Water and a regional official.

We identified stakeholders from non-EPA agencies and organizations that played a part in waste management activities. We interviewed the incident FOSC and

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<sup>8</sup> “Testimony of Lisa P. Jackson, Administrator U.S. Environmental Protection Agency, Before the Subcommittee on Commerce, Justice, Science, and Related Agencies, Committee on Appropriations, United States Senate,” July 15, 2010, [http://www.epa.gov/ocir/hearings/testimony/111\\_2009\\_2010/2010\\_0715\\_lj.pdf](http://www.epa.gov/ocir/hearings/testimony/111_2009_2010/2010_0715_lj.pdf).

<sup>9</sup> “EPA Response to BP Spill in the Gulf of Mexico,” <http://www.epa.gov/BPSpill>.

other Coast Guard staff at UAC, BP environmental staff and a contractor at UAC, and state environmental agency staff in Louisiana and Alabama. In addition, we interviewed site managers at a staging area and a landfill in Louisiana, as well as a parish president in Louisiana. We chose these locations based on the high volumes of oil-contaminated waste staged or disposed of there.

We reviewed the following criteria to determine EPA's planned waste management activities:

- Federal regulations and guidance for contingency planning
- Waste management directives and letters issued by the FOSC
- BP's waste management plans and waste tracking reports
- Pollution removal funding authorizations
- EPA's plans for waste management oversight, as described in documents obtained from its website and in testimony by the EPA Administrator.

We then reviewed the staging area and landfill site visit and sampling reports from EPA, Louisiana Department of Environmental Quality, and Alabama Department of Environmental Management. We reviewed those reports to determine whether EPA's planned activities matched its actual activities, and to compare EPA's activities with the states' activities. Our interviews and review of internal communications from EPA Region 4, Region 6, and headquarters, as well as the states, supplemented our analysis of these documents.

The scope of this evaluation is limited to EPA's waste management oversight and activities from the point when waste was brought to a staging or decontamination area to its final disposition. EPA played a role in shoreline and beach cleanup operations, but these activities were not identified by the Coast Guard or EPA as waste management activities and therefore fall outside of the scope of this review.

## Chapter 2

### EPA Demonstrated Leadership in Oversight of Waste Management Activities

For the Gulf Coast oil spill, EPA initiated oversight activities that went beyond its typical activities in less significant oil spills. To ensure that waste from the oil spill was safely and appropriately disposed of, EPA helped shape BP's waste management plans, conducted assessments of staging areas and landfills, sampled waste, and kept the public informed of its activities and results. The increased federal oversight of BP's waste management activities was not designed to independently account for the full volume and disposition of waste produced. However, EPA's oversight did provide additional transparency and increase measures to protect the environment and public health.

#### EPA Oversight Provided Assurance in Uncertain and Massive Spill Environment

In interviews with the OIG, EPA officials and management cited several reasons for EPA's increased oversight of BP's waste management activities during the Gulf Coast oil spill response, including the magnitude of the event, the need to address public concerns regarding the waste, and the impact of dispersants. A January 2011 recommendation given by the President's National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling called for an increase in government oversight. Specifically, the commission

recommended that EPA and the Coast Guard establish distinct plans and procedures for responding to a Spill of National Significance. As part of that recommendation, the report stated, "Increase government oversight of the responsible party, based on the National Contingency Plan's requirement that the

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*The Deepwater Horizon Oil Spill is a massive and potentially unprecedented environmental disaster that has already impacted the lives and the livelihoods of countless people in the Gulf Coast region. While BP is a responsible party for this oil spill, EPA has been working alongside many federal and state agencies to implement emergency oil spill response actions since day one of the incident. . . . EPA will continue to take a proactive and robust role in monitoring, identifying, and responding to potential public health and environmental concerns.*

—Lisa Jackson, EPA Administrator, Testimony before the United States Senate, Committee on Environment and Public Works, May 18, 2010

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government ‘direct’ the response where a spill poses a substantial threat to public health or welfare.”<sup>10</sup>

According to the NCP, the lead agency may request the support of other federal agencies to assist with tasks within their expertise. However, during the Gulf Coast oil spill response, EPA initiated response planning before funding reimbursement procedures were initiated by the Coast Guard. An EPA senior manager said in an interview that BP’s initial waste management plans, written before the spill occurred, were limited in detail and inadequate. EPA, as well as the Coast Guard, realized that more detailed and comprehensive plans were needed. EPA also realized that, compared with other oil spill responses, more EPA staff with waste management skills and knowledge were needed to ensure that BP’s waste management plans were adequate.

### ***BP’s Waste Management Plans***

To create enforceable waste management plans, the Coast Guard, with EPA’s concurrence, issued directives to BP outlining the requirements for BP’s plans. EPA, along with the Coast Guard and the relevant states, then reviewed BP’s initial waste management plans prior to the Coast Guard approving them. The directives required BP to continually update its website with:

- The volume of disposed waste
- The locations of staging areas, landfills, and other disposal or waste recovery facilities
- The volume of waste going to each disposal or recovery facility
- Updates to the list of approved facilities
- Results of all waste sampling

In addition, the Coast Guard–issued waste management directives included a provision that BP shall allow EPA, its representatives, authorized state agencies, and/or contractors access to all staging areas; transfer stations; decontamination stations; and recycling, reuse, and disposal facilities used to treat or store waste generated from the oil spill. At these sites, EPA was authorized to assess, sample, and inspect any oil and oil-contaminated solid and liquid wastes recovered during the cleanup. All sites where these wastes would be staged, treated, or disposed of would also be subject to all applicable federal, state, and local laws.

### ***EPA’s Waste Management Oversight Activities***

EPA’s oversight activities did not include procedures to independently track the transportation, volume, and disposition of the oil spill waste. However, part of BP’s transparency requirement, established by the waste management directives,

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<sup>10</sup> National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling Report to the President, *Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling*, January 2011, p. 268.

was for it to develop a tracking system specifying the amounts of waste collected and to post online the locations of staging areas and disposal facilities. EPA regions ensured that BP was complying with this requirement by reviewing the waste volume reports and the information BP posted on its website. EPA regions also worked with BP to ensure consistency in the way volumes were reported. When BP initially tracked solid waste by volume in one region and mass in another, EPA requested that BP provide consistent units of measure (mass) for all waste. BP complied with this request.

Prior to the issuance of waste management directives, EPA had started some of its waste management oversight activities, including landfill and staging area assessments. From May 27 to June 12, 2010, EPA regional staff and/or EPA contractors conducted initial assessments of each landfill. These assessments determined whether landfills were capable of handling the oil spill waste and were in compliance with applicable regulations and laws. Before BP finalized its list of approved landfills, EPA sought to identify any potential issues, looking at past compliance histories, status of current permits, and landfill design and capacity, as well as the existence of any community concerns.

EPA further ensured compliance at the landfill and staging area facilities by developing a Staging/Decontamination Area and Landfill Site Visit Plan. This plan stated that EPA

would conduct site visits to each landfill twice a month and to each staging and decontamination area once a week. For the most part, site visits were conducted according to EPA's plan. In a few instances in which the site did not receive oil spill waste materials or when there was a tropical storm, the visit was not conducted. EPA regional staff and/or EPA



EPA inspecting waste containers at staging areas in August 2010. (EPA photo)

contractors visited over 190 staging areas and decontamination sites from June 28 to October 4, 2010, and a total of 22 landfills from July 21 to September 29, 2010. These landfills and staging areas were located in Louisiana, Alabama, Mississippi, and Florida.

EPA developed assessment checklists for site visits that included items such as addressing any on-site spills of oily waste and ensuring that storage containers were lined and covered. EPA response staff then communicated any problems

they observed with site managers and followed up with managers and state environmental departments to make sure these problems were adequately addressed. Completed checklists, as well as summary reports of EPA's site visits, were posted on EPA's website. State environmental departments also maintained an almost daily presence at staging area, decontamination, and landfill sites, reporting on the compliance status of facilities as well as volumes of waste. EPA regional staff reviewed these reports to provide an additional level of oversight.



BP wastes (non-oil-contaminated trash and debris, and crude-contaminated debris) on the Springhill Landfill, Cambellton, Florida. (EPA photo)

EPA also developed a sampling plan to independently sample the waste and ensure that it was properly characterized. The plan detailed the tests to be performed, the frequency of testing, and where sampling would occur. The directives, issued by the Coast Guard, required that BP conduct regular sampling and make the results publicly available. Preliminary results of EPA's testing of oily debris, tar balls, mousse oil, and other petroleum waste streams showed only chemical constituents that are usually found in petroleum products. According to EPA's website, independent sampling of waste only resulted in one toxicity characteristic exceedance. This exceedance was for benzene, a hazardous constituent that was detected at a level above the threshold for EPA's toxicity characteristic regulation. These results, when posted on EPA's website, provided transparency and gave assurance that the waste was being handled properly.

## Conclusion

Although EPA was not the lead federal agency during this response, EPA identified activities that would improve existing waste management plans and procedures, and ensured that appropriate precautions were taken with the waste. EPA's waste management oversight activities were not designed to provide, nor were they required to provide, an independent, full accounting of the volume and disposition of the oil spill waste. EPA took a leadership role to inform and oversee BP's oil spill waste management activities and ensure that these activities were transparent and protective of human health and the environment.

## Chapter 3

# EPA Action on Lessons Learned Can Help Ensure Future Success in Oil Spill Waste Management

Despite EPA’s leadership and success in conducting oversight of the Gulf Coast oil spill waste management activities, EPA fell short of its own goals in some instances. While EPA has waste management expertise and worked to oversee BP’s waste management activities, it had to implement new response and oversight tools for this nationally significant spill. Waste management plans and oversight procedures were developed and finalized as the response progressed, potentially diverting resources to planning that could have been used to strengthen the response effort. EPA’s oversight did not include all affected states and disposal facilities. In addition, EPA’s testing regime and recommendation for disposal of E&P waste were a departure from its own guidance on the handling of E&P waste. This departure, as well as a lack of sufficient justification from EPA officials and management, created some confusion and frustration among EPA, Coast Guard, and BP staff. EPA can build on its response success in this oil spill by creating improved, formal guidance to be used in future oil spills.

### **EPA Needs Better Waste Management Guidance for Spills of National Significance**

Because the Gulf Coast oil spill occurred in the coastal zone, the NCP designated the Coast Guard as the lead federal agency, and EPA was designated as a supporting agency by the Coast Guard FOSC. The NRF, which describes the national approach for responding to domestic incidents, also provides additional information on the responsibilities of the lead agency during oil spill responses.<sup>11</sup> However, neither the NCP nor the NRF outlines specific waste management oversight roles for EPA when it is not the lead agency during a response. These guidelines instead leave it up to the FOSC—in this case the Coast Guard—to request additional support as needed from supporting agencies. The NCP also allows the government to designate an oil spill as nationally significant, but beyond naming a National Incident Commander, this designation does not activate any additional procedures, as the President’s commission points out in its report on the Gulf Coast oil spill.<sup>12</sup>

Supplementing the NCP, ACPs contain location-specific procedures for responding to discharges. However, at the time of the Gulf Coast oil spill, EPA and its federal partners had not adequately updated waste management guidelines

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<sup>11</sup> Specifically, “Emergency Support Function #10—Oil and Hazardous Materials Response Annex,” of the NRF.

<sup>12</sup> National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling Report to the President, *Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling*, January 2011, p. 267.

in relevant ACPs. EPA, as the chair of the National Response Team,<sup>13</sup> may provide support to all Regional Response Teams by reviewing ACPs and ensuring consistency with national policies on emergency response.

Multiple ACPs cover the affected Gulf states, and all of these plans include some waste management planning. None, however, contain all of the required or optional guidance<sup>14</sup> as outlined in the NCP. For example, several of the ACPs contain checklists for addressing the sampling and classifying of waste, but only one identifies a hierarchy of preferences for disposal alternatives. None of the ACPs contains a complete list of the routes, methods, and sites for disposal of oil-contaminated waste. Additionally, two of these plans have sections for sample waste management plans, but these sections are blank. EPA can initiate more comprehensive and consistent planning for waste management oversight during oil spills by ensuring that the guidelines set forth by the NCP are complete in ACPs.

## **EPA Can Improve Performance During Spills of National Significance With Additional Planning**

EPA has over 30 years of experience in waste management, including its response activities related to debris removal after Hurricane Katrina, which provides it with a high degree of expertise in this area. Stemming from its RCRA program responsibilities, EPA provides technical assistance and guidance to state agencies in charge of solid waste management, and it has access to state and local officials responsible for maintaining environmental and human health protection at landfill and staging areas. With the number of staging areas and landfills involved in the Gulf Coast oil spill cleanup, EPA was well positioned to coordinate the waste management oversight operations. However, no plans or guidance had been developed in advance to outline what EPA's role would be in this area for coastal Spills of National Significance.

While the NCP allows for flexibility in determining response-specific procedures, EPA's lack of prior planning for Spills of National Significance, as well as the absence of complete waste management planning in the ACPs, may have led to some inefficiencies. Time had to be taken to develop waste management directives and finalize waste management plans during the oil spill. The Coast Guard, with the concurrence of EPA, issued a waste management directive for Louisiana, and a joint directive for Alabama, Mississippi, and Florida, near the end of June 2010, more than a month after oil first hit the Louisiana shoreline and

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<sup>13</sup> According to the NCP, the National Response Team is responsible for national response and preparedness planning, coordinating regional planning, and providing policy guidance and support to the Regional Response Teams. The National Response Team consists of representatives from designated agencies with a representative from EPA and the Coast Guard serving as the chair and vice chair, respectively. Regional Response Teams are responsible for regional planning and preparedness activities before response actions, and for providing support to the OSC when activated during a response.

<sup>14</sup> See "Background" in chapter 1 for a description of the required or optional guidance outlined in the NCP.

waste began to be generated. These directives required BP to add more detailed information to their two existing waste management plans (one for Louisiana and one for Alabama, Mississippi, and Florida). A Gulfwide plan was issued in October 2010, the same week EPA stopped its oversight of landfills and staging areas. Some UAC staff suggested that the extensive revisions to the plan required resources that could have been used elsewhere in the response.

EPA's role as a supporting agency to the Coast Guard may have created additional inefficiencies. According to a senior EPA official, it was efficient for EPA to work directly with BP on activities such as developing the waste management plans and day-to-day operations. However, while EPA could advise the Coast Guard on waste management directives to BP, it could not issue them directly.

A Coast Guard senior official stated that EPA was instrumental in developing the waste management directives and plans, as well as offering guidance on community concerns, waste monitoring, and waste sampling. In letters written by the Coast Guard FOSC and addressed to BP in July 2010, the FOSC advised BP to respond to EPA's comments regarding the waste management plans and timely posting of waste management information and data on BP's website.

EPA could further enhance its performance during nationally significant responses by establishing an agreed-upon exit strategy. Toward the end of the response, EPA and the Coast Guard did not have agreement on when EPA would end its presence at UAC. Consequently, a Coast Guard official suggested that EPA's physical presence at UAC ended too soon and may have contributed to some inefficiency. Meanwhile, EPA management stated that EPA staff at UAC did not have a sufficient amount of work. Additionally, some EPA responders felt that EPA conducted independent waste sampling and landfill and staging area visits for too long based on the consistent characteristics of the waste streams. Without established criteria for demobilizing its activities, EPA could either leave UAC too early or use resources unnecessarily by staying too long.

## **EPA Oversight Did Not Include All Affected States and Facilities**

EPA fell short of its own oversight goals, set out in the Administrator's testimony and statements on its website, by not including all involved states and facility types in some of the waste management plans and activities. EPA was diligent in visiting and assessing the landfills and staging areas used to dispose of and transport waste from the oil spill. However, it did not consistently visit or assess any other type of disposal facility. An EPA responder explained that, in EPA's opinion, health and environmental impacts at staging areas and landfills were of more concern to communities than the impacts at other types of disposal facilities.

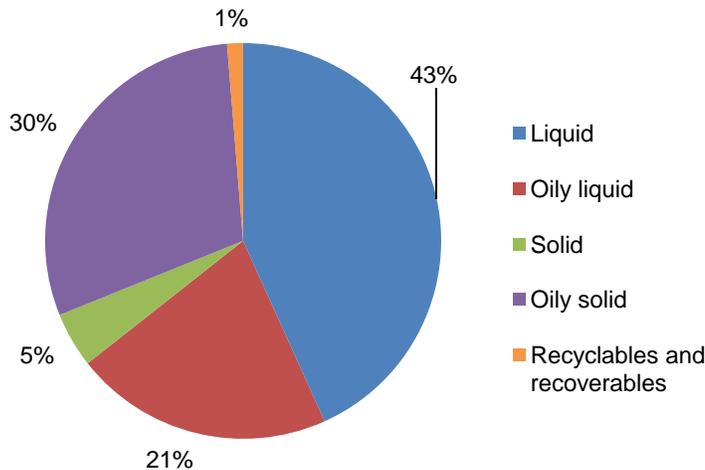
While BP's waste management plans included all states where oil spill waste was collected and disposed of, not all affected states were included in the waste

management directives and EPA’s on-site assessments. The directives included Louisiana, Alabama, Mississippi, and Florida, but did not include Texas and Oklahoma, states that also accepted oil spill waste and materials. According to the Chief of OSWER’s Waste Characterization Branch, Texas was not included in the directives because, initially, Texas was not expected to receive BP spill waste. However, Texas landfills, to a lesser extent than the landfills in Alabama, Florida, Louisiana, and Mississippi, did receive some waste. EPA visited landfills and staging and decontamination sites in Louisiana, Mississippi, Alabama, and Florida, but did not visit any Texas sites. EPA explained that it did not visit Texas staging areas and landfills because they were not in use during the time EPA was conducting site visits. Oklahoma was not included in the directives but received material for recycling.

During the response, EPA did not visit or assess liquid waste disposal facilities. As shown in figure 2, liquid oil waste (liquid and oily liquid) accounted for approximately 64 percent of the collected oil waste. This type of waste includes oil and water mixtures or emulsions such as liquid from skimming and recovery operations. Liquid waste also includes water that has minor amounts of oil mixed

with it, such as from decontamination, storm water, or treated water. It was disposed of in either UIC wells or POTW facilities. EPA stated that it omitted these facilities from its visits because UICs and POTWs are heavily regulated by the states and, after communicating with the states, EPA decided that additional oversight was unnecessary.

**Figure 2: Percentages of cumulative waste and materials,<sup>a</sup> June 2011**



Source: BP, *Weekly Waste Tracking Cumulative Report by Manifest Source, Report for Week of 06/13/2011–06/19/2011*, <http://www.bp.com>.

<sup>a</sup> “Waste and materials” refers to materials sent for disposal or recycling on land.



Workers pressure wash used oil boom. (EPA photo)

In addition to omitting liquid waste disposal facilities from its review, EPA did not visit or assess any recycling facilities. In BP's waste management plans, as well as in the NCP, recycling was listed as a preferable disposal option. Yet, compared to other methods of disposal, recycling accounted for the lowest volume of waste (a little over 1 percent of the 626 million pounds of waste collected) and was slow to get underway. When asked about the oversight omission for recycling facilities, EPA stated that materials sent for recycling are not considered to be waste, and EPA's oversight activities were confined to waste materials.

## **Some EPA Actions Regarding the E&P Waste Caused Confusion and Frustration**

The majority of waste generated from the Gulf Coast oil spill was exempted from federal hazardous waste regulations under the E&P exemption. Solid wastes that are covered by the E&P exemption are predominately regulated by state and local governments. However, during the Gulf Coast oil spill, EPA conducted independent sampling of the oil-contaminated waste to give additional assurance that it would be handled properly. During the response, EPA developed an internal question and answer document, designed as a summary response to legal questions that arose as a result of the Gulf Coast oil spill. The document was intended to provide brief responses as an aid to senior officials. According to an EPA senior manager, this document was used internally to justify the testing of the E&P waste, but we did not find evidence that it was widely shared or communicated beyond senior management recipients. In addition to testing the oil spill waste, EPA recommended disposal actions that some responders considered a departure from its general E&P guidance.

Although EPA regional response staff followed EPA's waste management oversight plans for the Gulf Coast oil spill, many responders we interviewed were critical of some of EPA's actions. Confusion and frustration, as well as differences of opinion among some EPA, Coast Guard, and BP responders,

hinged on three novel EPA-recommended procedures for characterizing and managing oil-contaminated waste: (1) EPA's independent waste sampling at and repeated site assessments of landfills and staging areas, (2) additional sampling and reporting required of BP, and (3) EPA's request that any waste that failed a toxicity test<sup>15</sup> be disposed of as hazardous waste.

Regarding the first two points of departure—waste testing, and repeated assessments and additional BP sampling and reporting—EPA senior managers explained that EPA's independent testing was done to address concerns regarding the magnitude of the event and the use of dispersants. Nonetheless, EPA and UAC responders stated that EPA's regulations do not require this additional testing. EPA's 2002 guidance on E&P waste states that it is the operator's (e.g., BP's) responsibility to determine whether waste is subject to hazardous waste regulations. Several EPA responders, including oil spill OSCs, told us that they were not aware of EPA ever having taken samples of oil spill waste prior to this spill. Operators are also not typically required to conduct sampling to the extent BP was required to do so by the waste management directives. While state responders conducted landfill and staging area inspections in coordination with EPA, one of the two states we spoke with was unaware of the extent to which EPA was testing the waste. Some responders we spoke with stated that a written statement from EPA regarding the E&P exemption may have lessened some of the confusion.

The third point of departure—EPA's recommendation for disposing of the waste—also generated criticism from EPA and UAC responders. According to the 2002 E&P guidance, E&P-exempt waste that is mixed with a nonexempt characteristic hazardous waste may lose its exemption if the mixture exhibits hazardous characteristics of the nonexempt waste. If the mixture exhibits hazardous characteristics of the exempt waste, however, the waste will still be exempt. While the use of dispersants—a nonexempt waste—created the potential for a mixture to occur, EPA recommended that *any* oil spill waste that failed a toxicity test be disposed of as hazardous waste. However, EPA's 2002 guidance does not speak to how to dispose of exempt waste that fails a toxicity test.

Several responders at EPA, the Coast Guard, and BP did not believe that EPA could require BP to dispose of E&P-exempt waste as hazardous, even if it failed a toxicity test. EPA's internal guidance on the Gulf Coast oil spill waste did not offer justification for disposing of E&P waste as hazardous waste. Ultimately, BP and the Coast Guard did not agree to EPA's waste disposal recommendation, and BP included language in its waste management plans that requested alignment with EPA's 2002 guidance.

Overall, we found no evidence that the confusion, frustration, and differences of opinion regarding the disposal and testing of E&P waste negatively impacted the waste management aspects of the spill response. However, in one instance,

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<sup>15</sup> Specifically, the Toxicity Characteristic Leaching Procedure test for volatiles, semivolatiles, and metals.

uncertainty regarding how to appropriately dispose of E&P exempt waste that failed a toxicity test led to a delay in disposing of a tank full of a skimmed oil and water mixture. From July 28 to September 22, 2010, this tank was stored at a staging area while several rounds of samples were taken to determine whether the mixture exhibited a benzene exceedance. The samples returned conflicting results, and EPA advised the Coast Guard that the “prudent approach” would be to dispose of the mixture in a UIC well designed to handle hazardous waste. A BP contractor then disposed of it in a well designed to handle industrial waste.



Example of a frac tank used to help oil and water separate. (EPA photo)

In an interview, a Coast Guard official stated that he likely spent 40 hours dealing with this one container of waste. He noted that this was a considerable amount of time to spend on a small amount of waste that was E&P exempt. It took 56 days for this container of waste to be disposed of—11 days longer than the maximum 45 days allowed for containers to be stored at staging areas, as specified by BP’s waste management plan. In addition, a UAC representative pointed out that the container used to store the waste in question could not be used for further cleanup activities during this time. Although the lack of consensus in this matter resulted in only one delay, the event points to a lack of consensus and clear guidelines for how to dispose of E&P waste that fails the toxicity test.

Moreover, while transparency was an issue of foremost importance to EPA during the response, it delayed posting information about this container of waste on its website. EPA updated its spill response activities—including waste management oversight—on its Gulf Coast Oil Spill Response website; however it took EPA almost 4 months to post information about the benzene exceedance. This information, along with data from the samples, was posted on EPA’s website on January 19, 2011.

## Conclusion

The additional sampling conducted by both EPA and BP provided assurance regarding the proper handling and disposition of the waste. However, the lack of a definitive statement from EPA and a lack of clear internal communications on the E&P waste exemption resulted in a lack of buy-in among EPA regional staff, the Coast Guard, and BP regarding some of EPA's waste management activities. This gap in communication on EPA's rationale for decisions about handling E&P waste, as well as the delay in posting sample results, demonstrates a lack of transparency in EPA actions on this matter.

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*I think that one of the lessons learned from this is that in this idea of a unified command, we are directing them [BP] to do things and we are working to get a job done, but we have a different responsibility as government agencies to make sure we do that with transparency. . . .*

—Lisa Jackson, EPA Administrator, Testimony before the House Transportation and Infrastructure Committee, May 19, 2010.

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A consistent and sufficiently justified message is necessary to ensure that EPA staff, as well as the regulated community, are fully knowledgeable of the necessity for additional oversight and testing of oil spill waste during future nationally significant spill events. A description of EPA's role and responsibility as a supporting agency in offshore Spills of National Significance, along with waste management plans in ACPs that cover all required guidelines under the NCP, would allow for a more efficient response in the future. Some of the obstacles EPA encountered could be avoided in the case of future Spills of National Significance by seeking increased clarification on waste management oversight in the NCP and enhancing its own planning for an event of this magnitude.

In its 2011–2015 strategic plan, EPA has recognized that it needs to review the BP Gulf Coast oil spill disaster, as well as its current practices. The plan states:

Given the Deepwater Horizon BP oil spill and the efforts to clean up and restore the Gulf of Mexico, EPA will review its current rules, guidelines and procedures on oil spills. EPA will ensure that it has the appropriate tools to prevent, prepare for, respond to, and recover from such incidents within its jurisdiction.

New NCP guidance to “add distinct plans and procedures for Spills of National Significance”<sup>16</sup> should capture EPA's lessons learned from this event, streamline

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<sup>16</sup> National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling Report to the President, *Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling*, January 2011, p. 267.

future response efforts, and designate clear lines of authority. EPA's oversight activities could have been more complete by including all states in the directives and all types of disposal facilities in its assessments. EPA can further assure its success in responding to future Spills of National Significance by updating its guidance on management of E&P waste. It can also provide more transparent and complete communication to responders and the oversight community on EPA opinions in this area.

## Recommendations

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

1. From lessons learned in response to this Spill of National Significance:
  - a. Work with other federal partners to determine whether the NCP and NRF should be updated to include processes for waste management oversight in response to nationally significant oil spills, including EPA's role as a supporting agency in offshore spills.
  - b. Work with other federal partners to complete guidance for waste management oversight in ACPs.
  - c. Develop a model waste management plan and a waste oversight framework that includes:
    - i. provisions for including all states and facilities involved in the response,
    - ii. definition of roles and responsibilities for all authorized responders, and
    - iii. an exit strategy for decommissioning waste management oversight activities.
2. To the extent needed, seek additional authorities from the lead agency to perform waste management oversight in offshore Spills of National Significance.
3. Update EPA's 2002 guidance on the E&P waste exemption to include circumstances under which E&P waste could be managed or disposed of differently, including during applicable oil spills. Incorporate into any lessons-learned review a discussion of EPA opinions and procedures for overseeing and handling waste from this spill, including those wastes subject to the E&P exemption.

## Agency Comments and OIG Evaluation

We reviewed OSWER's comments and made changes to the report and recommendations as appropriate. Appendix A provides the full text of OSWER's response and the OIG's comments.

We defer to OSWER on recommendation 2 and we consider that recommendation closed upon issuance of this report. Recommendations 1 and 3 are unresolved with resolution efforts in progress.

OSWER agreed with recommendation 1.c. and provided an acceptable corrective action plan, but did not provide milestone dates or a planned completion date. OSWER stated that it will develop a model waste management plan. In addition, it already has a guidance document and website where it will include a model waste management plan for a coastal Spill of National Significance and any additional guidance developed by EPA.

OSWER did not agree with recommendations 1.a. and 3. We revised both recommendations in response to Agency comments. For recommendation 1.b., OSWER did not provide a clear statement of agreement or disagreement.

# Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status <sup>1</sup>	Action Official	Planned Completion Date	Claimed Amount	Agreed To Amount
1	20	<p>From lessons learned in response to this Spill of National Significance:</p> <ul style="list-style-type: none"> <li>a. Work with other federal partners to determine whether the NCP and NRF should be updated to include processes for waste management oversight in response to nationally significant oil spills, including EPA's role as a supporting agency in offshore spills.</li> <li>b. Work with other federal partners to complete guidance for waste management oversight in ACPs.</li> <li>c. Develop a model waste management plan and a waste oversight framework that includes: <ul style="list-style-type: none"> <li>i. provisions for including all states and facilities involved in the response,</li> <li>ii. definition of roles and responsibilities for all authorized responders, and</li> <li>iii. an exit strategy for decommissioning waste management oversight activities.</li> </ul> </li> </ul>	U	Assistant Administrator for Solid Waste and Emergency Response			
2	20	To the extent needed, seek additional authorities from the lead agency to perform waste management oversight in offshore Spills of National Significance.	C	Assistant Administrator for Solid Waste and Emergency Response	09/01/11		
3	20	Update EPA's 2002 guidance on the E&P waste exemption to include circumstances under which E&P waste could be managed or disposed of differently, including during applicable oil spills. Incorporate into any lessons-learned review a discussion of EPA opinions and procedures for overseeing and handling waste from this spill, including those wastes subject to the E&P exemption.	U	Assistant Administrator for Solid Waste and Emergency Response			

<sup>1</sup> 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

## ***Agency Response to Draft Report and OIG Comment***

(Received September 1, 2011)

### **MEMORANDUM**

**SUBJECT:** Response to OIG Draft Evaluation Report, “EPA Should Clarify and Strengthen Its Waste Management Oversight Role With Respect to Oil Spills of National Significance,” Project No. OPE-FY10-0028, July 15, 2011

**FROM:** Mathy Stanislaus  
Assistant Administrator

**TO:** Arthur Elkins, Jr.  
Inspector General  
Office of Inspector General

We appreciate the opportunity to comment on the Office of Inspector General (OIG) draft evaluation report: “EPA Should Clarify and Strengthen Its Waste Management Oversight Role With Respect to Oil Spills of National Significance,” Project No. OPE-FY10-0028, dated July 15, 2011. We worked with OECA, OGC, and Regions 4 and 6 to prepare this response to the draft evaluation report.

The Deepwater Horizon (DWH) Oil Spill was an unprecedented event requiring an extraordinary response. The IG recognized that EPA’s oversight activities provided additional transparency and ensured that waste from the oil spill was safely and appropriately disposed. The report, however, would be improved through clarifications to two key areas: EPA’s role in a coastal spill response and the application of EPA’s hazardous waste regulations for exploration and production (E&P) wastes.

As a supporting agency to the Coast Guard, EPA conducted waste management activities throughout the course of the spill and for a time following the capping of the well. EPA collected, analyzed and posted data on its website regarding waste management activities to provide assurance to affected communities and other interested parties that oil-contaminated waste was properly managed and disposed. EPA reviewed and approved BP’s waste management plans, conducted assessments of landfills and staging and decontamination areas, accounted for the volume and disposition of the waste, performed independent waste sampling, assessed community impacts (Environmental Justice analyses) and engaged in community outreach to keep the public informed of EPA’s waste management activities. Throughout the course of the DWH response, EPA rapidly adapted and responded to ever-changing conditions and challenges to ensure the protection of human health and the environment.

**Recommendation 1.a.:** *OIG recommends that the Assistant Administrator for Solid Waste and Emergency Response work with other federal partners to update the NCP and National Response Framework to include processes for waste management oversight in response to nationally significant oil spills, including EPA’s role as a supporting agency in offshore spills.*

**Response:** EPA disagrees that additional processes for waste management oversight are needed for the National Oil and Hazardous Substances Contingency Plan (NCP) or the National Response Framework (NRF). EPA believes that adequate authorities exist. The NCP discusses waste management specifications for Subpart D – Operational Response Phases for Oil Removal. The NCP says that “oil and contaminated materials recovered in cleanup operations shall be disposed of in accordance with the Regional Contingency Plan (RCP), the Area Contingency Plan (ACP) and any applicable laws, regulations or requirements. Regional Response Team (RRT) and Area Committee guidelines may identify the disposal options available during an oil spill response and may describe what disposal requirements are mandatory or may not be waived by the On Scene Coordinator (OSC). The ACPs may identify a hierarchy of preferences for disposal alternatives, with recycling (reprocessing) being the most preferred, and other alternatives preferred based on priorities for health or the environment. (40 CFR § 300.31(c)). The current process, where the Federal On-Scene Coordinator (FOSC) requests support through the RRT or National Response Team (NRT), is the appropriate mechanism for EPA involvement in a coastal spill of national significance (SONS). The Coast Guard is fully aware of and understands EPA capabilities, including waste management support. During the DWH response, EPA effectively provided assistance and recommendations working as a support agency to the Coast Guard. EPA believes that the existing system worked well during the DWH response.

**OIG Response:** EPA has left out the introductory sentence to recommendation 1, which specifies that EPA’s actions in response to recommendations 1.a., 1.b., and 1.c. are intended to be “from lessons learned in response to this Spill of National Significance.”

We have modified recommendation 1.a. in our final report. However, we also note that, in response to recommendation 5 in OIG Report No. 11-P-0534, *Revisions Needed to National Contingency Plan Based on Deepwater Horizon Oil Spill*, August 25, 2011, EPA stated that it will work with federal partners to review this response and the NCP to address lessons learned and to develop guidance for Spills of National Significance. We believe that guidance on waste management oversight should be included in this review and that EPA could respond to recommendation 1.a. through corrective actions underway for recommendation 5 in the OIG’s August 25, 2011, report.

Regarding EPA’s role as a support agency during coastal Spills of National Significance, the NRF includes a description of roles for other supporting agencies in other functions; however, it does not specify roles for EPA when it is a supporting agency in the function of waste management. In addition, while EPA may believe the Coast Guard is aware of and understands EPA capabilities, including waste management support, the EPA’s support capabilities are not formally outlined. In our opinion, documentation of EPA’s capabilities and specific support functions would be a more effective management control for effective and efficient responses. Based on the experiences of the Coast Guard, EPA, and other federal agencies during this response, developing guidance that includes lessons learned from waste management activities will help enhance the efficiency and effectiveness of future responses.

*(Continued on next page)*

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The recommendation is unresolved with resolution efforts in progress. In its 90-day response to this report, EPA should provide an update on the resolution status and, if the recommendation is agreed to, provide estimated milestones for completion.

**Recommendation 1.b.:** *OIG recommends that the Assistant Administrator for Solid Waste and Emergency Response work with other federal partners to complete guidance for waste management oversight in ACPs.*

**Response:** During the DWH response, EPA recognized that a coastal SONS could likely require adjusting pertinent guidance. EPA has the flexibility to modify guidance, therefore EPA will review existing waste management guidance to determine whether it needs to be modified to better apply to a coastal SONS. Based upon the results of that review, EPA will take the appropriate actions. If the guidance is revised, EPA will work with other federal partners, through the RRTs, to assist ACs in addressing waste management oversight in ACPs. However, the application of waste management guidance for a coastal SONS would be subject to the review of Coast Guard, in conjunction with the RRT.

**OIG Response:** In this report, we identify gaps in the ACPs that cover the Gulf states affected by this oil spill. All of these plans include some waste management planning. None, however, contain all of the required or optional guidance as outlined in the NCP. For example, several of the ACPs contain checklists for addressing the sampling and classifying of waste, but only one identifies a hierarchy of preferences for disposal alternatives. None of the ACPs contains a complete list of the routes, methods, and sites for disposal of oil-contaminated waste. Additionally, two of these plans have sections for sample waste management plans, but these sections are blank. We continue to recommend that guidance for waste management oversight in the ACPs should be completed or updated. Because EPA's response to recommendation 1.b. is not a clear statement of agreement or disagreement, this recommendation has been designated unresolved with resolution efforts in progress. In its 90-day response to this report, EPA should provide an update on the resolution status and, if the recommendation is agreed to, provide estimated milestones for completion.

**Recommendation 1.c.:** *OIG recommends that the Assistant Administrator for Solid Waste and Emergency Response develop a model waste management plan and a waste oversight framework that includes: i.) provisions for including all states and facilities involved in the process; ii.) definition of roles and responsibilities for all authorized responders; and, iii.) an exit strategy for decommissioning waste management oversight activities.*

**Response:** EPA agrees with this recommendation to develop a model waste management plan. In, addition, as noted in **Recommendation 1.b.**, EPA will determine whether it needs to modify any waste management guidance as it relates oversight. OSWER has already prepared a guidance, "Planning for Natural Disaster Debris (PNDD)," March 2008, which captures lessons learned from our response to Hurricane Katrina and other natural disasters. This guidance provides a framework for the development of incident-specific waste management plans, which can be applied to any disaster. This guidance discusses waste management and recycling approaches for state and local emergency planners/managers to use in planning for debris

transportation, treatment, and disposal from any natural disaster. We applied this guidance in reviewing BP's waste management plans. The Federal Emergency Management Agency (FEMA) was involved in the review process for this guidance and the guidance is consistent with FEMA's Debris Management Guidance. This guidance is available at: <http://www.epa.gov/osw/consERVE/rrr/imr/cdm/pubs/pnDD.pdf>.

Second, OSWER has created a website that focuses on "Waste Management for Homeland Security Incidents" at: <http://epa.gov/waste/homeland/>. This website includes a wealth of waste management information for emergency managers and planners and covers all types of disasters. This website was developed as part of EPA's ongoing waste management efforts under Homeland Security Presidential Directives, as well as the National Response Framework. Many of these efforts have been undertaken jointly with other federal and state agencies. The model waste management plan for a coastal SONS and any additional guidance developed by EPA (**Recommendation 1.b.**) that would modify or amend existing waste management oversight guidance for application to a coastal SONS would be posted to this website.

**OIG Response:** EPA agreed to the recommendation. We acknowledge EPA's efforts to prepare for waste management activities in the event of a natural disaster or homeland security incident. In the attached comments, EPA itself notes that it is inappropriate to compare the response to this oil spill with the Agency's response to Hurricane Katrina because the Hurricane Katrina was a Stafford Act response, not a CWA Section 311 response, and EPA plays a different role in Stafford Act responses than in CWA Section 311 responses in the coastal zone. In addition, the purpose of the guidance document, *Planning for Natural Disaster Debris*, is described as a tool for local communities to use. We also did not learn of the document during our initial research efforts and it is unclear the extent to which EPA responders referred to the document during this response. In terms of the "Waste Management for Homeland Security Incidents" website, the website should clearly indicate that, in addition to homeland security incidents, it will also contain information on waste management oversight guidance applicable to a coastal Spill of National Significance so that those seeking the information can easily find it. EPA should also consider whether there is another website specific to oil spills where it would be appropriate to place a model waste management plan.

Because EPA did not provide a planned completion date, this recommendation is unresolved with resolution efforts in progress. In its 90-day response to this report, EPA should include estimated milestone dates and a planned completion date, or confirm its completion of this recommendation.

**Recommendation 2:** *OIG recommends that the Assistant Administrator for Solid Waste and Emergency Response to the extent needed, seek additional authorities from the lead agency to perform waste management oversight in offshore spills of national significance.*

**Response:** EPA believes it has sufficient authority to perform waste management oversight, therefore, EPA does not believe it is necessary to seek additional authorities from the lead agency. The Coast Guard is aware of the expertise that EPA can provide. The role of a supporting agency is clearly defined, and EPA believes we can provide effective assistance in the

support agency role during an event in which the Coast Guard designates the FOSC. See the response to **Recommendation 1.a.**

**OIG Response:** We disagree that the role of the supporting agency is clearly defined; however, our intent for this recommendation was for EPA to determine whether it needed additional authorities to perform waste management oversight in offshore Spills of National Significance. We raised the issue to EPA management and while we continue to believe the supporting agency role is not clearly defined, we defer to the Agency's decision. Because EPA has determined that it does not need additional authorities, we consider this response to be completed and closed upon issuance of the report.

**Recommendation 3:** *OIG recommends that the Assistant Administrator for Solid Waste and Emergency Response update EPA's 2002 guidance to include EPA opinions and procedures for overseeing waste from this spill and circumstances under which E&P waste could be managed or disposed of differently.*

**Response:** EPA disagrees with the recommendation to update the 2002 guidance on E&P waste ("Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazardous Waste Regulations"). This guidance serves a very specific purpose: to guide regulators and the regulated community in determining which wastes generated at oil and gas production operations are regulated as hazardous waste under RCRA. Developing procedures for managing and disposing of wastes from oil spills raises fundamentally different issues. Depending on the origin of the spill, the E&P exemption may not apply to oil spill wastes (for example, crude oil spilled from a tanker in transport would not be subject to the E&P exemption). Therefore, the E&P guidance would not be an appropriate place to address these issues.

**OIG Response:** We recognize that the E&P exemption does not apply to all oil spills, and we are recommending that EPA update the guidance only as it applies to the E&P exemption. We have not found any other comprehensive E&P guidance written by EPA for the purpose of clearly communicating to regulators and the regulated community. Therefore, this guidance represents an opportunity for EPA to demonstrate transparency by discussing possible exceptions and/or departures from general procedures during oil spills and other circumstances.

Details on how EPA, as a support agency, responded to this Spill of National Significance, including actions taken to oversee waste management activities, should be preserved to assist future response efforts. We agree that, as the 2002 E&P guidance is a general guidance document, it may not be the appropriate place to discuss EPA opinions and procedures for the Gulf Coast oil spill. Therefore, we have revised the recommendation in the final report to have EPA incorporate into its lessons-learned review a discussion of EPA's opinions and procedures for overseeing and handling waste from this spill, including waste subject to the E&P exemption. The recommendation is unresolved with resolution efforts in progress. In its 90-day response to this report, EPA should provide an update on the resolution status and, if agreed upon, provide estimated milestones for completion.

Also please find attached our specific comments on the draft report that address concerns that require your attention and consideration. Should you have any questions, please contact Dana

Tulis, in the Office of Emergency Management at (202) 564-8600. We appreciate your efforts and your consideration of our comments as you develop the final report.

Attachment

cc: Barry Breen, OSWER  
Lisa Feldt, OSWER  
Suzanne Rudzinski, ORCR/OSWER  
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Al Armendariz, Region 6  
Sam Coleman, Region 6  
John Blevins, Region 6  
Carl Edlund, Region 6  
Gwendolyn Keyes-Fleming, Region 4  
Dee Stewart, Region 4  
Franklin Hill, Region 4  
Carolyn Copper, OIG

## **Specific Comments on Report Findings:**

### **At a Glance, under “What We Found”:**

- 1.) First Paragraph, Beginning of First Sentence; Replace “Within EPA’s limited scope of responsibility, its oversight of the Gulf Coast oil spill...” with “EPA was a support agency to the Coast Guard, the lead federal agency responsible for designating the Federal On-Scene Coordinator (FOSC) during the Deepwater Horizon (DWH) oil spill. Within EPA’s scope of responsibility as a support agency, its oversight of the Deepwater Horizon (DWH) oil spill...”

**OIG Response:** This sentence was modified in our final report to clarify that EPA was a support agency to the Coast Guard.

- 2.) First Paragraph, End of First Sentence; Replace “disposed of properly” with “disposed of in a manner protective of human health and the environment.” (To reflect that the directives were made pursuant to the FOSC’s authority under the Clean Water Act (CWA) Section 311).

**OIG Response:** As written, “disposed of properly” is an appropriate, summary-level statement for the first sentence in the “At a Glance” section. Additional information on the protection of human health and the environment appears later in the same paragraph as well as in the chapter sections of the report.

- 3.) First Paragraph, Second Sentence; Insert “as well as expectations” Between “waste management activities” and “during the Gulf Coast oil spill” (to reflect that EPA did more than provide input into waste directives but gave broader-based input and recommendations to the FOSC).

**OIG Response:** The sentence provides an appropriate, summary-level description for the “At a Glance” section. Additional information on EPA’s waste management oversight activities appears in the chapter sections of the report.

- 4.) First Paragraph, Last Sentence; Add “spill” between “was the first” and “to be designated.”

**OIG Response:** An insertion of the word “spill” is not needed in this sentence.

- 5.) Second Paragraph, First Sentence; Replace “significant spills” with “Spills of National Significance.”

**OIG Response:** This sentence was modified in our final report.

- 6.) Second Paragraph, Second Sentence; Add “for waste exempt from RCRA’s Subtitle C hazardous waste regulations” between “in place” and “at the time of the spill.”

**OIG Response:** The sentence provides an appropriate, summary-level description for the “At a Glance” section. Additional information on the exemption appears in the chapter sections of the report.

- 7.) Second Paragraph, Third Sentence; Replace “response plans” with “waste management plans in Area Contingency Plans (ACPs).”

**OIG Response:** The sentence provides an appropriate, summary-level description for the “At a Glance” section. Additional details on the completion status of the ACPs appear in the chapter 3 of the report.

- 8.) Second Paragraph, Fifth Sentence; As described elsewhere, EPA did not act in a manner different than provided by guidance. In this case, EPA made recommendations based on the magnitude and nature of the spill response. See comments 15 -19 under the section titled, **Chapter 3 – EPA Action on Lessons Learned Can Help Ensure Future Success on Oil Spill Waste Management.**

**OIG Response:** No change is needed. The EPA guidance document, *Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazardous Waste Regulations*, issued in 2002, provides information on the basic rules for determining whether a waste is exempt. During the Gulf Coast oil spill, EPA decided that the oil spill waste should be managed in a manner different than provided by this guidance.

## Chapter 1 – Introduction

- 1.) Page 1, **Purpose**, First Paragraph, First Sentence; In the first sentence, reference is made to the “BP America Production Company’s Gulf Coast oil spill,” and elsewhere in the report the oil spill is referred to as the “Gulf Coast oil spill,” the “BP spill,” and the “Deepwater Horizon oil spill”. There should be some consistency established in terminology when referring to the oil spill. The spill should be referenced as the “Deepwater Horizon (DWH) oil spill.”

**OIG Response:** This sentence was modified in the final report to prevent misreading. We consistently use the term “Gulf Coast oil spill” in our report, and no further modification is needed.

- 2.) Page 1, **Background**, First Paragraph, Last Sentence; The statement is made that “an estimated 5 million barrels of oil” were spilled by BP. The quantity of oil spilled is in dispute and is a litigable issue as part of the government’s enforcement action filed in December 2010 against BP and other responsible parties. The quantity spilled is also a key element for liability and is an express penalty factor under Section 311 of the CWA. Because this is a matter that is currently before the court as part of the government’s enforcement action, it would be inappropriate for the IG to be making independently representations regarding the quantity spilled (a view shared by the Department of Justice). This reference should be deleted or rephrased, with proper source citations provided (e.g., “By the time that the damaged oil wellhead was capped on July 15, 2010,

[insert number of barrels] millions of barrels of oil were estimated by [insert source providing the estimation] have been released into the Gulf of Mexico”).

**OIG Response:** A footnote has been added in our final report citing the reference we used and noting the ongoing investigation into the number of barrels spilled, as OSWER requested in OIG Report No. 11-P-0534, *Revisions Needed to National Contingency Plan Based on Deepwater Horizon Oil Spill*.

- 3.) Page 1, ***Background***, First Paragraph; This paragraph should be revised to clearly state that because the DWH oil spill occurred in the coastal zone, a Coast Guard official was designated as the Federal On-Scene Coordinator (FOOSC) to coordinate and direct the response action. In addition, because the spill was classified by the Coast Guard as a “spill of national significance,” another Coast Guard official was designated as the National Incident Commander. EPA’s role as a support agency to the Coast Guard for this spill should also be made clear in this paragraph.

**OIG Response:** This comment refers to the organization of this section of the report rather than the content. The additional information requested appears on page 3 and 4 of the report. No modifications are needed.

- 4.) Page 1, ***Waste Streams and Disposal***, First Paragraph, Fourth Sentence; Generally POTW is referred to as “Publicly Owned Treatment Works.” The abbreviations page and page 1 use “Publically...”

**OIG Response:** The spelling was modified in our final report.

- 5.) Page 1, ***Waste Streams and Disposal***, First Paragraph Fifth Sentence; “Solid waste” is a defined term in RCRA. Under RCRA, “solid waste” includes liquid wastes. Replace “solid waste and materials” with “waste material in solid form.”

**OIG Response:** This sentence was modified in our final report.

- 6.) Page 2, ***Waste Streams and Disposal***, Second Full Paragraph, Second Sentence; Replace “This determination” with “This exemption from Subtitle C regulations.”

**OIG Response:** This sentence was modified in our final report. “Subtitle C regulations” is referenced in the previous sentence and does not need to be repeated here.

- 7.) Page 3, ***Waste Streams and Disposal***, Top of Page, Carryover Sentence; Replace “E&P wastes may be treated as solid wastes, and states have approval to manage them” with “solid wastes that meet the E&P exemption from federal hazardous waste regulations are regulated as nonhazardous solid waste, predominately by state and local governments.”

**OIG Response:** This sentence has been modified in our final report.

- 8.) Page 3, *Waste Streams and Disposal*, Top of Page, First Complete Sentence; Replace “management or oversight of E&P waste disposal” with “management of solid waste.”

**OIG Response:** This sentence has been modified in our final report.

- 9.) Page 3, *Waste Streams and Disposal*, Top of Page, Between First and Second Complete Sentence; The following sentence should be added; “EPA’s role in solid waste management includes setting national goals, providing leadership and technical assistance, and developing guidance and educational materials.”

**OIG Response:** The scope of this paragraph is limited primarily to a description of the oil and gas exploration and production waste exemption. Information regarding EPA’s role in solid waste management appears in chapters 2 and 3 of the report.

- 10.) Page 3, *Waste Streams and Disposal*, Top of Page, Third Complete Sentence; This sentence should be deleted or clarified – the statement that, “The states involved in the Gulf Coast oil spill response have authority to manage nonhazardous waste, including E&P waste” incorrectly suggests that states have exclusive authority. E&P waste is exempted from federal hazardous waste regulations, but EPA retains statutory enforcement authorities and the FOOSC has independent response authority under CWA Section 311.

**OIG Response:** This sentence was deleted from our final report.

- 11.) Page 3, *Waste Streams and Disposal*, Top of Page, Fourth Complete Sentence; Replace “provides information on the basic rules for determining whether a waste is exempt” with “provides background on the E&P exemption, information on how to determine whether a solid waste is covered by the E&P exemption, examples of wastes that are covered and not covered by the E&P exemption, the status of E&P waste mixtures, and clarifications on common misunderstandings about the E&P exemption.”

**OIG Response:** This sentence was modified in our final report. The scope of this section is limited to a brief summary of the E&P exemption and the guidance document, and therefore, this level of detail is not necessary here. However, we have included a few of the additional details suggested.

- 12.) Page 3, *Oil Spill Response Guidance and Procedures*, First Paragraph; The following should be clarified:
- The chair of the National Response Team (NRT) is a representative of EPA and the vice chair is a representative of the Coast Guard, with the exception of periods of activation because of response action. During activation, the chair is the member agency providing the On-Scene Coordinator (OSC). See 40 CFR § 300.110. Therefore, during the Deepwater Horizon (DWH) oil spill, the chair was the Coast Guard.
  - Area Committees [not the Regional Response Team (RRT)] are responsible for developing Area Contingency Plans (ACPs) for each area designated by the

President. RRT's are responsible for reviewing all of the ACP's in their respective region. Responsibilities of Area Committees are described in §300.205(c). See 40 CFR § 300.105.

- ACPs are plans that are developed to be implemented in conjunction with the National Contingency Plan (NCP) and Regional Contingency Plan (RCP). See 40 CFR § 300.5 (Definitions).

**OIG Response:**

First bullet point: The description in question is part of a brief background on the NCP and is consistent with the NCP. The next section of the report, as well as information in chapter 3, explains the roles of EPA and USCG during the Gulf Coast oil spill response. No change is needed.

Second bullet point: The section was modified to include a note that Area Committees develop ACPs.

Third bullet point: This section was modified in our final report to include this information.

- 13.) Page 4, *BP and Federal Government Roles in Cleanup*, First Paragraph, First Sentence and Footnote (FN) 5; Although it assumed this role during the response, BP is not the only party legally responsible for the cleanup of the DWH oil spill, as the first sentence of this paragraph seems to indicate. Rather, as indicated in FN 5, the Coast Guard designated BP and 5 other companies as responsible parties under the Oil Pollution Act. The text of this paragraph should be revised to conform to the footnote.

**OIG Response:** This sentence was modified in our final report to incorporate the footnote into the text.

- 14.) Page 4, *BP and Federal Government Roles in Cleanup*, First Paragraph, Second Sentence and FN 6; It is unclear how FN 6 relates to the second sentence of this paragraph, which identifies the lead response agencies for oil spills in the coastal and inland zones. It would be more appropriate to cite to the CWA Section 311(c) and (e) authorities in FN 6. In addition, the current language does not clearly summarize EPA's RCRA Section 7003 authority; if such language is used, replace the current language with the following: "Under RCRA, EPA may require action upon receiving evidence that past or present handling of solid or hazardous waste may require action when a situation may present an imminent and substantial endangerment to health or the environment. It was not necessary for EPA to invoke this authority during the response."

**OIG Response:** Further citation of the sentence referenced is not necessary. The paragraph was modified in our final report to incorporate the footnote into the text.

- 15.) Page 4, *BP and Federal Government Roles in Cleanup*, First Paragraph, Second to Last Sentence; This sentence needs to be restructured to clarify the intended meaning. The beginning of the sentence, “EPA established responders” is completely independent from the second component of the sentence, “BP Unified Commander served as the responsible party’s counterpart to the FOSC.” EPA responders were supporting the Coast Guard FOSC, not BP.

**OIG Response:** The sentence was modified in our final report.

- 16.) Page 4, *BP and Federal Government Roles in Cleanup*, Second Paragraph, Second Sentence; Insert the phrase “and certain deliverables” after “submit waste management plans...”

**OIG Response:** The sentence was modified in our final report.

- 17.) Page 4, *BP and Federal Government Roles in Cleanup*, FN 7; The FOSC is a “pre-designated federal official” not a “representative.”

**OIG Response:** The sentence was modified in our final report.

- 18.) Page 5, *Noteworthy Achievements*, First Sentence; Replace “EPA worked to ensure” with “As a support agency to the Coast Guard, EPA worked to ensure.”

**OIG Response:** The sentence was modified in our final report.

- 19.) Page 5, *Noteworthy Achievements*, Third Paragraph, Second Sentence; The sentence should be revised to read, “We interviewed the *incident* FOSC...”

**OIG Response:** The sentence was modified in our final report.

- 20.) Page 6, *Scope and Methodology*, Last Paragraph, First Sentence; Delete “and” so the phrase reads “waste management oversight activities.”

**OIG Response:** This is an editorial comment. No change is needed.

## Chapter 2 – EPA Demonstrated Leadership in Oversight of Waste Management Activities

- 1.) Page 7, First Paragraph, First Sentence; Delete “and plans” so the phrase reads “EPA initiated oversight activities that went beyond...”

**OIG Response:** The sentence was modified in our final report.

- 2.) Page 7, First Paragraph, Third Sentence; The statement that the increased federal oversight of BP’s waste management activities “was not designed to independently account for the full volume and disposition of waste produced” suggests that some amount of spill waste was unaccounted for. There is no evidence that would suggest or

support this conclusion. Similarly, on page 8 under *EPA's Waste Management Oversight Activities* the first sentence states that EPA's oversight did not include procedures to "independently track" the handling and disposal of spill waste. EPA did perform independent reviews of the waste tracking data BP submitted on the ICS-209 Forms (Consolidated Daily Waste Tracking Reports). These independent EPA reviews included ensuring that the data submitted were consistent between the daily and cumulative reports for waste volumes, waste classifications and disposal facilities used. In addition, EPA monitored BP's waste tracking and reporting for its timeliness in accordance with the provisions set forth in the waste management directives. In fact, on several occasions EPA and Coast Guard pointed out the waste tracking deficiencies in letters to BP (July 1, 2010 letter from EPA/OSWER AA to BP and a July 24, 2010 letter from the Coast Guard to BP). These letters were posted on EPA's Gulf Spill website.

**OIG Response:** The statement describes the intent of the federal oversight of BP's waste management activities and does not imply that spill waste was unaccounted for. However, EPA did not provide evidence during our review that it conducted a complete and full independent accounting of the oil spill waste. EPA's oversight activities at staging and decontamination areas as well as landfills did not include a review of the accuracy of what went on BP's waste manifests. While EPA did monitor the waste tracking and reporting, it relied on BP's documentation and website to do so. Furthermore, the review of BP's waste tracking and reporting for timeliness is not equivalent to an independent review. No change is needed to the report.

- 3.) Page 9, *EPA's Waste Management Oversight Activities*, Second Full Paragraph, First Sentence; EPA did not as the sentence states, "ensure[ ] compliance at the landfill and staging area facilities by developing a Staging/Decontamination Area and Landfill Site Visit Plan." Rather, EPA screened facilities for compliance status before their inclusion in the waste management plans and performed site visits to landfills to ensure that BP was handling and disposing of waste in accordance with approved waste management plans. These sentences should be changed to more accurately reflect EPA's role and that the states have primary responsibility for compliance at non hazardous waste landfills, as they are the approved authority for the administering the RCRA Subtitle D program.

**OIG Response:** The fact that EPA screened landfill and staging area facilities for compliance status before their inclusion in the waste management plans is described in the second paragraph on page 9. In the second paragraph, we note that EPA has developed a Staging/Decontamination Area and Landfill Site Visit Plan. We describe what the plan stated EPA would do and the extent to which the plan was adhered to. It is not necessary to restate here that the states have primary responsibility for compliance at nonhazardous waste landfills, as that information is stated elsewhere in the report.

- 4.) Page 9, *EPA's Waste Management Oversight Activities*, Second Full Paragraph, Last Sentence; This sentence should be clarified to make it clear that the "2-month period" refers to the 22 site visits to landfills and the period of "June 28 to October 4, 2010" refers to the 190 visits to staging areas and decontamination sites.

**OIG Response:** The timeframes for site visits have been clarified for both the landfills and the staging areas and decontamination sites.

- 5.) Page 10, *EPA's Waste Management Oversight Activities*, First Paragraph, Third Sentence under Photo; Replace "EPA required, though the directives issued by the Coast Guard" with "The directives required" (to reflect that the Coast Guard was the FOSC, not EPA).

**OIG Response:** The sentence was modified in our final report.

- 6.) Page 10, *EPA's Waste Management Oversight Activities*, First Paragraph, Fourth Sentence under Photo; Under RCRA, a product cannot be a waste. Therefore, replace "waste products" with "waste streams."

**OIG Response:** The sentence was modified in our final report.

- 7.) Page 10, *EPA's Waste Management Oversight Activities*, First Paragraph, Fifth Sentence under Photo; Replace "toxicity exceedance" with "one exceedance of the toxicity characteristic."

**OIG Response:** The exceedance of the toxicity characteristic has been further explained and clarified in the report.

### **Chapter 3 – EPA Action on Lessons Learned Can Help Ensure Future Success on Oil Spill Waste Management**

- 1.) Page 12; The introductory paragraph states that "EPA fell short of its own goals in some instances." This statement is without support and the report does not specify which goals EPA failed to meet. The statement that the development of waste plans and procedures as the response progressed "potentially divert[ed] resources to planning that could have been used to strengthen the response effort" is likewise without supporting evidence or foundation. EPA believes that were ample resources in the Incident Command System (ICS) to handle the waste management activities that were necessary for the response for the DWH response. The ICS system is structured to provide the necessary resources and that diversion of resources would be contrary to the ICS system.

**OIG Response:** The EPA Administrator's prepared statement for the U.S. Senate, Subcommittee on Commerce, Justice, Science, and Related Agencies, Committee on Appropriations, included the following summary statement, which noted that EPA was committed to protecting Gulf Coast communities:

EPA will continue to provide full support to the USCG and the Unified Command, and will continue to take a proactive and robust role in dispersant use as well as monitoring, identifying, and responding to potential public health and environmental concerns, including waste management and beach cleanup. EPA, in coordination with our federal, state, and local partners, is  
*(Continued on next page)*

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committed to protecting Gulf Coast communities from the adverse environmental effects of the Deepwater Horizon oil spill. As local Gulf Coast communities assess the impact of the Deepwater Horizon oil spill on their economies, EPA, in partnership with other federal, state, and local agencies, as well as other community stakeholders, will devote its efforts necessary to assist in the oil spill response.

In addition, EPA stated on its website that it would conduct visits to landfills twice a month and to staging areas once a week. Directives issued by the Coast Guard also provided EPA access to facilities or any location where waste is temporarily or permanently stored by BP. However, as described on pages 14–16 of this report, EPA did not visit landfills, staging areas, and recycling centers in the Gulf Coast communities of Texas and Oklahoma. Moreover, EPA did not visit or assess any liquid waste or recycling facilities that accepted oil spill waste.

In the overview paragraph for this chapter, we include the statement: “Waste management plans and oversight procedures were developed and finalized as the response progressed, potentially diverting resources to planning that could have been used to strengthen the response effort.” The statement is supported by text on pages 13–14. We do not dispute or analyze the level of resources used for waste management planning in the Incident Command System. However, we do note that these resources (time, material, or personnel) could have potentially been used in other aspects of the response.

- 2.) Page 12; In the first and last sentence of the introductory paragraph, clarify that when the IG is referring to the “oil spill” it means the “Deepwater Horizon oil spill.”

**OIG Response:** The first sentence was modified in our final report to be consistent with the rest of the report. This is an editorial comment and no further changes are needed.

- 3.) Page 12, *EPA Needs Better Waste Management Guidance for Spills of National Significance*, First Paragraph, First Sentence; Add the following language to the beginning of the sentence: “Since the Deepwater Horizon oil spill was in the coastal zone,…”

**OIG Response:** The final report text has been modified accordingly.

- 4.) Page 12, *EPA Needs Better Waste Management Guidance for Spills of National Significance*, First Paragraph; The last sentence of this paragraph states that classification of an oil spill as a “spill of national significance” (SONS) does not have any procedural impact beyond the naming of a National Incident Commander. While this statement may be an accurate reading of the applicable NCP provision (40 CFR § 300.323), it fails to take into account CWA Section 311(c)(2)(A). This statutory provision authorizes the President to direct all federal, state and private actions to remove a discharge that “is of such a size or character as to be a substantial threat to the public health or welfare of the United States.” In such a case, under Section 311(c)(2)(B), the President is authorized to take necessary removal actions “without regard to any other provision of law governing contracting procedures or employment of personnel by the Federal Government.” The

President's authority under this provision, as with other CWA Section 311(c) authorities, has been delegated by Section 3 of Executive Order 12777 to the Coast Guard for the coastal zone and to EPA for the inland zone. Use of this authority, in conjunction with classification of a spill as a SONS, would provide additional flexibility in responding to such a spill.

**OIG Response:** We acknowledge that Clean Water Act Section 311 (c) grants certain authorities and understand that the NCP allows for flexibility during oil spill responses. However, this section of the report is focused on specific procedures that may be activated when a spill is designated a Spill of National Significance. As Clean Water Act Section 311 does not specifically mention Spills of National Significance, changes to the final report are not necessary.

- 5.) Page 13, *EPA Can Improve Performance During Spills of National Significance with Additional Planning*, First Paragraph; The last sentence states that, "However, no plans or guidance had been developed in advance to outline what EPA's role would be in this area for coastal Spills of National Significance." As noted several times in the draft report, as the designated lead agency for coastal spills, it is up to the Coast Guard to determine whether or not to even involve EPA in responses to coastal spills, including waste management. The Coast Guard bears the responsibility for pre-planning to the extent they believe appropriate. The IG should clarify whether it is suggesting that EPA should expend its resources to plan for actions for which it has no jurisdiction absent a Coast Guard request. The IG also compares EPA's response in DWH with EPA's response in Katrina. This comparison is inappropriate because Hurricane Katrina was a Stafford Act response, not a CWA Section 311 response, and EPA plays a different role in Stafford Act responses than in CWA Section 311 responses in the coastal zone.

**OIG Response:** We acknowledge that EPA works at the request of the Coast Guard during NCP responses in the coastal zone. However, Emergency Support Function #10 of the National Response Framework identifies functions for supporting Agencies. In our opinion, this creates an opportunity to develop clarifying and implementing guidance on the roles of supporting agencies during responses under the NCP. We have compared EPA's response to Hurricane Katrina only to point out EPA's experience in dealing with large volumes of disaster debris over an extended period of time. No further changes to the draft report are necessary.

- 6.) Page 13, *EPA Can Improve Performance During Spills of National Significance with Additional Planning*, Third paragraph, Second Sentence; The phrase "Time had to be taken" indicates a negative impact, but there is no evidence to support any negative impact.

**OIG Response:** The Coast Guard issued waste management directives in June 2010. The Gulfwide waste management plan was finalized in October 2010, approximately 4 months later and at a time when waste management oversight activities were winding down. "Time had to be taken" is a descriptive phrase and appropriate in the context of this paragraph.

- 7.) Page 14, *EPA Can Improve Performance During Spills of National Significance with Additional Planning*; Top of Page; The last sentence states that, "Some UAC staff

suggested that the extensive revisions to the plan required resources that could have been used elsewhere in the response.” There is no evidence cited to support this statement. In addition, the import of this statement is unclear. The IG seems to suggest that the waste management plans should not have been revised to address the evolving and changing situation presented by the handling of DWH oil spill waste.

**OIG Response:** The statement describes what we heard from some UAC staff, and we believe that it is a valid point. As noted in our response to the previous comment, it took approximately 4 months to develop and finalize the waste management plans. When the Gulfwide waste management plan was finalized in October 2010, it was at a point when the waste management oversight activities were winding down. This calls into question whether the amount of time spent on the plan impacted its utility.

- 8.) Page 14, *EPA Can Improve Performance During Spills of National Significance with Additional Planning*, Third Paragraph; The fourth sentence in this paragraph states that, “[S]ome EPA responders felt EPA conducted independent waste sampling and landfill staging area visits for too long based on the consistent characteristics of waste streams.” The intent of this statement is not clear – while it tends to suggest that the IG believes that EPA should have conducted less sampling and fewer site inspections, this contradicts statements elsewhere in the report suggesting that EPA should have conducted more inspections and sampling – including the section immediately following this statement. EPA believed it was appropriate to conduct an aggressive independent waste sampling and landfill/staging area visits to ensure that BP’s waste management activities were appropriate for the waste encountered. This was especially important considering the magnitude and extent of the spill (covering a large portion of the Gulf, impacting 4 states and 2 EPA Regions), the duration of the spill, the weathering of the spill materials, EPA’s and the public’s concern over the use of dispersants, the changes in BP’s waste management approaches and facilities utilized to manage the waste, and long term restoration activities (some of which is still occurring).

**OIG Response:** This sentence reflects what we heard in meetings with EPA regional staff and is cited as such. This statement is included because it supports our finding that there were no established criteria for demobilizing EPA’s activities during the Gulf Coast oil spill response. No changes to the final report are necessary.

- 9.) Page 14, *EPA Oversight Did Not Include All Affected States and Facilities*, First Paragraph; The second sentence states that, “EPA was diligent in visiting and assessing the landfills and staging areas used to dispose of and transport waste from the oil spill. However, it did not consistently visit or assess any other type of disposal facility.” This statement is both inaccurate and misleading. EPA never committed to do inspections at recycling and treatment facilities. EPA committed to evaluate all disposal facilities to ensure that they were appropriate to receive the type and quantity of waste being disposed of, as well as their compliance records (noted in Chapter 2). (Note: EPA also was committed to visit and assess staging areas.) EPA also relied on a mix of federal and state resources to ensure oversight at facilities designated to receive waste (also noted in Chapter 2), and maintained and exercised its authority to sample and inspect as needed (additionally noted in Chapter 2). EPA focused its direct on-site activities at locations

where it perceived the highest potential risks due to mishandling at solid waste landfills receiving the vast majority of oil spill waste (to ensure that no hazardous wastes were disposed of at such landfills and that the waste that was disposed of was not presenting an imminent and substantial endangerment to health or the environment) and at staging areas (most of which were not pre-existing, permitted facilities and thus presented the greatest risk of exposure). The IG appears to be criticizing the Agency for prioritizing its oversight activities and resources based on the volume and nature of the waste and facilities.

**OIG Response:** This section of the report is accurate, and we do not believe it is misleading. The Agency did not prioritize its oversight activities and resources solely based on the volume and nature of the waste and facilities. As shown in figure 2 on page 15, liquid waste made up 64 percent of the collected waste. Furthermore, while the Agency focused on landfills and staging areas in Alabama, Louisiana, Mississippi, and Florida, it did not visit the same types of facilities in Texas, nor did it visit any recycling facilities.

- 10.) Page 16, *EPA Oversight Did Not Include All Affected States and Facilities* First Paragraph, Last Sentence; Solid waste includes any material to be disposed; it may include materials to be recycled. The statement that “materials sent for recycling are not considered wastes” is not always true. If a recycled material is not a solid waste, then it is not a hazardous waste and is not subject to RCRA Subtitle C requirements. However, if the material qualifies as a solid and is a hazardous waste, it is subject to Subtitle C regulation. The sentence needs to be rewritten.

**OIG Response:** Before drafting this report, we sought to determine why recycling facilities were not included in EPA’s waste management oversight activities. This statement comes directly from our meeting with EPA in which we briefed Agency managers on our draft findings and potential recommendations, seeking clarification on issues where needed. This section of the report discusses limitations in EPA’s oversight, and the above reference to Subtitle C regulations is out of context. No further changes are necessary.

- 11.) Page 16, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, Heading; The heading needs to be revised. The word “Exemption” should be deleted from the heading or add the word “Hazardous” in front of “Waste.”

**OIG Response:** The heading was modified in our final report.

- 12.) Page 16, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph, First Sentence; The sentence should be revised to read, “The majority of waste generated from the Deepwater Horizon oil spill was exempted from federal hazardous waste regulations under the E&P exemption.”

**OIG Response:** The sentence was modified in our final report.

- 13.) Page 16, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph, Second Sentence; This sentence should be revised to

read, “Solid wastes that are covered by the E&P exemption are regulated primarily by state and local governments.”

**OIG Response:** The sentence was modified in our final report.

14.) Page 16, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph; The last sentence states that, “EPA recommended disposal actions that some responders considered a departure from its general E&P guidance.” Guidance is not legally binding and EPA has the ability to depart from guidance where appropriate. During EPA’s response to the DWH oil spill, guidance was modified to address the evolving situation. Recommending that E&P waste that failed TCLP [Toxicity Characteristic Leaching Procedure] go to a Class I UIC facility, rather than a Class II UIC facility, was consistent with providing the best possible protection to the environment and the surrounding communities. It was also appropriate from a legal perspective. EPA recommended that the Coast Guard, as the FOOSC, order BP to dispose of the waste in a Class I facility. The Coast Guard declined to do so. The IG appears to take the policy debate between EPA and the Coast Guard about the appropriate handling of E&P waste that failed the TCLP as evidence of “confusion” on the applicability of the E&P exemption.

**OIG Response:** We have correctly stated that EPA’s response to the E&P waste that failed the Toxicity Characteristic Leaching Procedure was a recommendation to the Coast Guard. While EPA may have the ability to modify guidance, we are pointing out that some responders we spoke to—both Coast Guard and EPA staff—questioned EPA’s recommendation. The 2002 E&P guidance was referenced by EPA staff and in internal EPA guidance related to the Gulf Coast oil spill. As we write on page 19, when departing from guidance, a consistent message is necessary to ensure that EPA staff is fully knowledgeable of the necessity for additional oversight. No further changes are necessary.

15.) Page 16, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph, Fourth Sentence; The IG has mischaracterized the purpose and intent of the Q&A document, and then criticizes the Q&A document for failing to cover matters (additional testing of the oil spill waste prior to disposal) that it was not intended to cover. The Q&A document was designed as a summary response to legal questions that arose as a result of the Deepwater Horizon oil spill. The document was intended to provide brief responses as an aid to senior Agency officials. The document was not intended to reflect the comprehensive analysis of individual spill-specific issues (the waste management directives and plans developed pursuant to those directives were intended to address this level of detailed requirement).

**OIG Response:** We have modified our description of the Q&A document. Although we recognize that the Q&A document was intended for senior Agency officials, we were also told by headquarters that the document was widely distributed to headquarters and regional management and staff working on the spill response. However, we did not find evidence throughout our evaluation that the document was widely shared. Further guidance on the management of the E&P waste would have provided more transparency within EPA, as we point out in the conclusion of this chapter.

- 16.) Page 17, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Complete Paragraph; Strike, “EPA’s 2002 Guidance on E&P waste states that it is the operator’s (e.g., BP) responsibility to determine whether waste is subject to hazardous waste regulations.” This statement from the guidance is taken out of context. 40 CFR § 262.11 requires a generator of solid waste to make a hazardous waste determination. While a generator of solid waste is required to make such a determination, EPA and its authorized states retain the ability to make their own determination and challenge a generator’s determination.

**OIG Response:** The purpose of this paragraph is to show that EPA’s testing of the waste was a departure from general procedure, according to EPA’s guidance and according to some staff we spoke to, which resulted in some confusion and/or criticism. We therefore do not believe these statements were taken out of context. We also go into detail about the directives that mandated activities specific to this oil spill in chapters 1 and 2 of this report. No further changes are necessary.

- 17.) Page 17, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Complete Paragraph; Strike, “Several EPA responders, including oil spill OSC’s, told us they were not aware of EPA ever having taken samples of oil spill waste prior to this spill.” That may be true, but there is no comparison with the activities conducted in other oil spills with the activities conducted during the DWH response. As noted on page 4 of the report to provide oversight of BP’s waste management activities, the Coast Guard, with EPA concurrence, issued waste management directives to BP.

These directives required BP to submit waste management plans and certain deliverables to be approved by the Coast Guard, and to report information on the amount and characteristics of the waste on BP’s website. The waste management directives were shared with the States prior to the Coast Guard’s approval. Also the development of the waste plans, which covered all affected states and allowed for state-specific management activities, was approved by the federal and state oversight agencies. Therefore, federal and state responders were aware of the activities that were required to be undertaken to respond to the DWH spill.

**OIG Response:** The purpose of this paragraph is to show that EPA’s testing of the waste was a departure from general procedure, according to EPA’s guidance and according to some staff we spoke to, which resulted in some confusion and/or criticism. We therefore do not believe these statements were taken out of context. We also go into detail about the directives that mandated activities specific to this oil spill in chapters 1 and 2 of this report. No further changes are necessary.

- 18.) Page 17, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, Third Full Paragraph; The first sentence states that, “Several responders at EPA, the Coast Guard, and BP did not believe EPA could require BP to dispose of waste as hazardous, even if it failed a toxicity test.” EPA never stated that such a disposal was required. EPA asked the FOOSC - which had the legal authority under CWA Section 311 to require such waste to be disposed in a Class I facility - to require

such a disposal in the interest of environmental protection. Also, replace “to dispose of waste as hazardous” with “to dispose of E&P waste in accordance with the RCRA Subtitle C hazardous waste regulations.

**OIG Response:** We have attributed this opinion to staff we spoke with at UAC, and we have accurately characterized the opinion based on what we heard. Elsewhere in our report where we discuss the waste in question without attribution, we characterize EPA’s request to the Coast Guard as a recommendation. We have modified the second part of the sentence to clarify that we are discussing E&P waste. No further changes are necessary.

19.) Page 18, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph under Photo; The third sentence states that, “It took 56 days for this container of waste to be disposed of — 11 days longer than the maximum 45 days allowed for containers to be stored at staging areas, as specified by BP’s waste management plan.” EPA and the Coast Guard agreed that disposal in Class I UIC well was legally proper if ordered by the FOSC pursuant to CWA Section 311 if the FOSC determines that such disposal is appropriate to protect public health or welfare of the United States from an imminent and substantial threat. EPA asked the FOSC to require disposal of the waste in a Class I UIC well.

**OIG Response:** We note the Agency’s comment, but it does not address the sentence. This sentence describes the amount of time the container of waste was held. No changes are needed for our final report.

20.) Page 18, *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph under Photo; The fourth sentence states that, “In addition, a UAC representative pointed out that the container used to store the waste in question could not be used for further cleanup activities during this time.” This statement draws conclusions that are without factual support. The report cites no evidence that the container used to store the waste would have been utilized for further cleanup activities.

**OIG Response:** The statement comes from a UAC representative, and we believe it is a valid point. It is also a fact that the container could not be used for two purposes (storing the waste in question and further cleanup activities) at the same time.

21.) Page 18: *Some EPA Actions Caused Confusion and Frustration Regarding the E&P Waste Exemption*, First Paragraph under Photo, Last Sentence; Delete “exempt” from the phrase “dispose of the E&P exempt waste.”

**OIG Response:** The sentence was modified in our final report.

22.) Page 19, *Conclusion*, First Paragraph, First Sentence; Replace “provided assurance regarding the disposition and proper handling of waste” with “provided assurance regarding the proper handling and disposition of waste.”

**OIG Response:** The sentence was modified in our final report.

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