

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



# **MEMORANDUM**

SUBJECT:	Lessons Learned with regard to Waste Management during the Deepwater Horizon Oil Spill
FROM:	Mathy Stanislaus Assistant Administrator
TO:	Regional RCRA Division Directors, Regions 1-10 Regional Superfund Division Directors, Regions 1-10

The purpose of this memorandum is to describe the lessons learned by EPA with regard to waste management during the Deepwater Horizon Oil Spill, in response to the EPA Office of Inspector General (OIG) evaluation report, *EPA Should Clarify and Strengthen Its Waste Management Oversight Role With Respect to Oil Spills of National Significance* (OIG Report No. 11-P-0706, September 26, 2011).<sup>1</sup> A Spill of National Significance (SONS) is a spill that, "due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge." 40 CFR § 300.5. EPA provided support to the U.S. Coast Guard (USCG) during the response to the Deepwater Horizon Oil Spill,<sup>2</sup> which was designated a SONS. This memorandum reflects EPA's experiences regarding waste management activities during the Deepwater Horizon Oil Spill. While this document specifically addresses waste management for SONS, the information also may be useful for smaller discharges.

As became apparent during the Deepwater Horizon Oil Spill, a SONS will likely generate a large quantity of waste over a wide area. Many waste streams will be generated, such as:

- unadulterated waste crude oil;
- tar balls;
- oily wastewater and decontamination water;
- oil-contaminated soil and vegetative debris;
- other oil-contaminated debris;

<sup>&</sup>lt;sup>1</sup> This document is intended solely as guidance for U.S. EPA. It is not a regulation. It does not change or substitute for any legal requirement. This document is not legally enforceable, and does not confer legal rights or impose legal requirements upon any member of the public, States, or any other Federal agency.

<sup>&</sup>lt;sup>2</sup> EPA is the lead agency (the Federal On-Scene Coordinator (FOSC)) for inland SONS, and the USCG is the lead agency for coastal SONS.

- oil-contaminated cleanup equipment (e.g., containment booms, rags) and personal protective equipment;
- samples;
- hazardous waste and uncontaminated debris collected from cleanup operations; and
- uncontaminated trash (e.g., food waste, paper, plastic bottles, aluminum cans).

As a result of the quantities and types of waste generated from a SONS, as well as the wide area affected, EPA learned that stakeholders at federal, state, local, tribal, and territorial levels and the affected communities are likely to closely scrutinize how the waste is managed. In addition, the high visibility of the incident may result in communities, especially communities that may be disproportionally affected by waste management activities, being concerned about the management of wastes generated from the SONS in their local facilities (e.g., landfills, recycling facilities), even when those wastes are the types of wastes that generally would be managed at those facilities under normal conditions. As further described below, it is critical that 1) all waste be managed properly and 2) waste management activities be as transparent as possible, including providing interested parties with access to information regarding these activities.

### Managing Waste from an Oil Spill of National Significance

A key lesson learned from the Deepwater Horizon Oil Spill is that the magnitude and complexity of a SONS necessitate an overall framework for managing all wastes generated. It also is important that the parties involved follow all applicable laws with regard to the handling, transportation, storage, treatment, and disposal of the waste. Multiple authorities may be available to ensure that wastes are managed in a manner that is protective of human health and the environment.

The Federal On-Scene Coordinator (FOSC) has authority to ensure the proper management of all generated wastes.<sup>3</sup> For example, the FOSC may direct a responsible party to describe its waste management activities in an incident-specific waste management plan. This directive can require the responsible party to develop a waste and materials management plan, subject to FOSC approval, that incorporates good waste management practices, including a waste sampling plan, tracking system/reporting plan, and community outreach plan.

In order to identify the available options for the proper management of wastes generated during a SONS, a determination should be made as to how wastes are classified under the Resource Conservation and Recovery Act (RCRA). RCRA requires that any generator of solid waste determine whether or not the waste is defined as hazardous under RCRA<sup>4</sup> and then manage the waste accordingly. Nonhazardous solid waste management facilities and practices are regulated under RCRA Subtitle D, while hazardous waste is regulated under RCRA Subtitle C. Some waste streams generated as a result of an oil spill may be exempt from RCRA Subtitle C hazardous waste regulations if they meet the definition of "exploration and production" (E&P) wastes;<sup>5</sup> however, any exempt E&P wastes remain subject to applicable RCRA Subtitle D regulations, state solid waste regulations, and possibly other specific regulations (e.g., state oil

<sup>&</sup>lt;sup>3</sup> See 40 CFR § 300.310(c) and Clean Water Act (CWA) § 311(c) or (e).

<sup>&</sup>lt;sup>4</sup> See 40 CFR § 262.11.

<sup>&</sup>lt;sup>5</sup> Under 40 CFR § 261.4(b)(5), "[d]rilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy" are solid wastes but are not subject to RCRA Subtitle C hazardous waste regulations.

and gas regulations). Furthermore, exempt E&P waste that is mixed with non-exempt hazardous waste may be subject to the Subtitle C hazardous waste regulations.<sup>6</sup> All wastes generated during a SONS remain subject to other authorities, such as the RCRA § 7003 (Imminent and Substantial Endangerment)<sup>7</sup> and Clean Water Act (CWA) § 311<sup>8</sup> authorities.

#### Transparency and Access to Information

Another key lesson learned is the importance of transparency and public access to information. Therefore, EPA recommends the activities described below be considered for SONS, as appropriate. To further the transparency of the waste management activities of all involved parties, waste should be tracked from its origin to its final disposition, including waste that is recycled. This tracking data should be made publically available on the appropriate website for the response. Information on the waste type, origin, date of collection, characterization, and quantity may be tracked along with the staging area, waste transportation route, and waste management facility that accepts the waste. Relevant operational information on the staging areas, landfills, and other facilities receiving the waste, including the facilities' names, locations, points of contact, capacities, permits, and compliance histories, also should be posted on the website. The location information can be used to create a map of the facilities for public use. This information can help answer questions or address concerns about how and where the waste is being managed.

Moreover, as part of any waste management oversight activities during a SONS, community concerns and environmental justice issues regarding selected facilities and transportation routes should be identified. Public meetings can be held in the affected communities to address any potential concerns or complaints with respect to waste management. In addition, using the available authorities as discussed previously, the responsible party's waste management plan may be reviewed, if applicable, staging areas and waste management facilities may be visited, and the waste may be independently sampled to help ensure that the waste is being managed in a manner that is protective of human health and the environment. The data generated from these activities should be posted on the appropriate website(s), along with questions and answers about the waste management activities.

<sup>&</sup>lt;sup>6</sup> More information can be found in EPA's "Exemption of Oil and Gas Exploration and Production Waste from Federal Hazardous Waste Regulations," which is available at <u>http://epa.gov/osw/nonhaz/industrial/special/oil/oil-gas.pdf</u>. This document provides guidance on the regulatory exemption for wastes uniquely associated with oil and gas exploration and production.

<sup>&</sup>lt;sup>7</sup> RCRA § 7003 authorizes EPA to bring a lawsuit or issue an administrative order "upon receipt of evidence that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment." EPA has issued guidance on the use of Section 7003, which may be found at

http://www.epa.gov/compliance/resources/policies/civil/rcra/rcrasect7003-rpt.mem.pdf.

<sup>&</sup>lt;sup>8</sup> For example, CWA § 311(c) provides broad authority to respond to discharges and threatened discharges of oil and hazardous substances as defined at 40 CFR § 116.4. CWA § 311(e) provides that when the "President determines that there may be an imminent and substantial threat to the public health or welfare of the United States…because of an actual or threatened discharge of oil or a hazardous substance from a vessel or facility, the President may take any other action under this section, including issuing administrative orders, that may be necessary to protect the public health and welfare." The EPA Office of Enforcement and Compliance Assurance (OECA) has developed guidance addressing the issuance of orders under CWA § 311. The guidance is available at http://www.epa.gov/compliance/resources/policies/cleanup/oil/cwaguide.pdf.

#### **Conclusion**

As noted previously, a SONS is a spill that may affect a large area and generate a large amount and a great variety of wastes. It is by definition a spill that requires a complex and coordinated response effort by federal, state, local, tribal, territorial, and private parties. Therefore, due to its nature, a SONS will pose challenges for the management of the generated waste. EPA plays a vital role in a SONS response and, as the Deepwater Horizon Oil Spill showed, waste management is a critical, highly visible, and long-term part of any response. EPA, as appropriate, should work with the responsible party and federal, state, local, tribal, and territorial officials, use available authorities, oversee waste management activities in support of and as directed by the FOSC, and provide information to the public to ensure that the waste is being properly managed to protect human health and the environment. For a coastal SONS, EPA may exercise its waste management authorities on a case-by-case basis in coordination with, and in support of, the USCG FOSC. A SONS is likely to raise waste management issues that have national significance, and questions may arise regarding the applicability of various authorities to the management of generated wastes. Therefore, we encourage you to consult with the EPA Headquarters Emergency Operations Center, which will be activated to support EPA's activities for an inland or coastal SONS in support of the FOSC.

If you have any questions on this memorandum, please contact Betsy Devlin, Director, Materials Recovery and Waste Management Division, at (703) 308-7906 or devlin.betsy@epa.gov, or have your staff contact Melissa Kaps at (703) 308-6787 or kaps.melissa@epa.gov.

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