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Reply to

Attn of:

DEC 0 5 2012

CAPT J. Caplis

CG-MER

MEMORANDUM

May & Lander Ms. Mary E. Landry From:

COMDT (CG-5RI)

To:

LANTAREA (LANT-3) PACAREA (PAC-3)

Subi:

AREA CONTINGENCY PLANNING PROCESS JOB AID

Ref:

(a) Charter to Establish a Working Group between the Bureau of Ocean Energy Management, Regulation, and Enforcement, and the U.S. Coast Guard (13 Jan 2011)

(b) USCG/BSEE Worst Case Discharge Contingency Plan Analysis Final Report

(30Jun2011)

(c) National Contingency Plan, 40 C.F.R. §300

(d) COMDTINST 16471.3, Area Contingency Plan Organization, Content, Revision Cycle, and Distribution

(e) Msg 112024Z JAN 11 REGIONAL AND AREA CONTINGENCY PLAN PREPAREDNESS FOR A WORST CASE DISCHARGE

(f) Marine Safety Manual, Volume IX, COMDTINST M16000.14 (series)

- 1. The BP Deepwater Horizon Oil Spill tested our organization's ability to effectively respond to a WCD, and it highlighted the importance of comprehensive and updated Regional and Area Contingency Plans (RCP/ACPs). An interagency Working Group established by reference (a), jointly surveyed the worst case discharge (WCD) scenarios for Oil Spill Response Plans (OSRPs) throughout each of the Gulf of Mexico, Pacific, and Alaska Outer Continental Shelf (OCS) regions, followed by a review of each of the RCPs and ACPs affected by those scenarios. The resultant effort identified major oil spill response preparedness gaps in all the RCPs and ACPs that were reviewed, which are summarized in reference (b).
- 2. The enclosed job aid is meant to both address the preparedness gaps discussed above, as well as assist Regional Response Teams (RRTs) and Area Committees nationwide with developing key WCD planning elements in their respective plans. While the emphasis is on planning for WCD scenarios in ACPs, each chapter of the job aid contains helpful guidance that is applicable to other general oil spill planning processes, and often will have relevance to RCPs as well as ACPs. Of particular importance to note, the job aid calls critical attention to the need for updated compliance with environmental laws and regulations, such as the Endangered Species Act, and stresses proper consultation and documentation practices. This job aid does not establish new requirements, but rather should be viewed as supplemental guidance to existing regulations and policies found in references (c) through (f).
- 3. Area Commanders are requested to provide this guidance letter and job aid to District and Sector Commanders. The job aid should be shared and discussed with the members of each RRT and Area Committee, and Coast Guard RRT Co-Chairs and FOSCs should ensure that the

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respective plans under their oversight are updated appropriately. The ACP Planning Process Job Aid and the WCD Contingency Plan Analysis Final Report (reference (b)) will be uploaded to the new Coast Guard Office of Marine Environmental Response (CG-MER) Portal, located at: https://cgportal2.uscg.mil/units/cgmer/sitepages/home.aspx.

4. Questions or comments regarding this guidance can be directed to the USCG Headquarters Office of Marine Environmental Response Policy, Policy Development Division (MER-1). Points of Contact: CDR Ed Bock (Division Chief), (202) 372-2234, Edward.L.Bock@uscg.mil; LCDR Drew Casey, (202) 372-2675, Drew.M.Casey@uscg.mil.

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(1) Area Contingency Planning Process Job Aid Encl:

Area Contingency Planning Process Job Aid

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Area Contingency Planning Process Job Aid Introduction

Overview

This job aid was developed to assist Federal On Scene Coordinators (FOSCs) and Area Committees develop key elements of Area Contingency Plans (ACPs). The planning processes described in each chapter of this job aid are applicable for all general oil spill planning; however, this job aid places additional emphasis on planning for Worst Case Discharge (WCD) scenarios including vessels as well as onshore and offshore facilities. This job aid complements existing Coast Guard policy guidance and is formatted in accordance with COMDTINST 16471.3. The chapters in this job aid reflect the ACP format found in COMDTINST 16471.3. Furthermore, the order of chapters follows a natural planning process for ACP development. This process answers the following questions:

- What are the potential sources (e.g., facility, vessel, etc.) and volumes for an oil spill?
- What local areas could be impacted?
- Which areas are the most important for protection?
- What strategies are available to mitigate economic/environmental impacts?
- What equipment and capabilities are available to implement these strategies?

As part of the continuous plan review and update cycle, it is recommended that every FOSC and Area Committee is guided by the steps contained within each chapter in the order they are presented in this job aid.

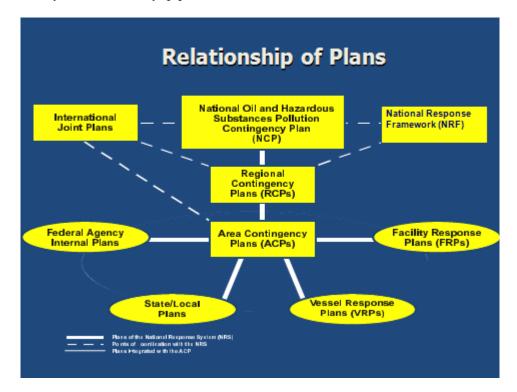
Background

The development and implementation of ACPs is a core component of the Coast Guard's Marine Environmental Response (MER) program. ACPs also fall under the Department of Homeland Security's Maritime Response mission. ACPs are critical elements of sound oil spill response, incident management, and all-hazards preparedness.

The Coast Guard's MER program has a direct impact on the resiliency of the Maritime Transportation System. Major oil spills have the potential to close major seaports, disrupt commerce, and cause significant economic damage to our nation. The primary goal of every response, regardless of size, is to mitigate or prevent damage to people, property and the environment. The ACP format aligns with National Incident Management System (NIMS) Incident Command System (ICS), and every ACP should support a scalable response to pollution incidents of all types and sizes.

ACPs are operational, as well as coordination plans. Development of ACPs is a continuous process; the plan should be viewed as a "living" document. Productive discussions and strong partnerships must be cultivated with all stakeholders during the Area Committee process in order to inform a plan that, when implemented, will be adequate to effectively respond to a WCD within a Captain of the Port (COTP) Zone.

Family of Response Plans under the National Response System The National Response System (NRS) provides a framework for coordination among federal, state, and local responders and RPs to respond effectively to oil discharges, releases of hazardous substances. The NRS also includes four levels of contingency planning (national, regional, local, and industry) that guide response efforts. As defined in the NCP, Regional Contingency Plans (RCP) provide for regional coordination with states and local Area Committees in response to oil and hazardous material incidents. ACPs, which represent oil and hazardous substance response planning at the local level, should contain the description of the geographic area, areas of economic and environmental importance that require protection strategies and a description of the equipment, personnel, and resources available for effective removal of a discharge. The Oil Pollution Act of 1990 (OPA 90) places responsibility on industry to be able to effectively respond to a spill involving an offshore facility, onshore facility, pipeline, or vessel.



The ACP should describe in detail how the plan integrates RCPs, as well as VRPs, offshore and onshore FRPs, best management practices (BMPs) for the protection of natural resources, marine firefighting plans, and marine salvage and lightering plans. During ACP development, the Area Committee should compare response strategies, capabilities, WCD scenarios, roles and responsibilities, and other response information found in FRPs, VRPs, and oil spill response plans (OSRPs) to ensure alignment. The ACP should also align with NIMS, the National Response Framework (NRF), Area Maritime Security Plans, and other applicable plans, manuals, and documents.

Coast Guard's Role under the NCP

Under the National Contingency Plan (NCP) (40 CFR 300), the Coast Guard plays a key role at the National Response Team (NRT), the Regional Response Team (RRT) and local Area Committee levels to engage the National Response System to verify threats (spill potential), risks (resources that might be harmed in a spill), and strategies necessary to mitigate the threats, minimize the risk and respond to, and recover from, an incident or event.

In the coastal zone, Coast Guard FOSCs are responsible for coordinating local preparedness and directing response activities for their respective zone. These responsibilities include overseeing the development of the ACP and organizing an Area Committee whose membership is comprised of stakeholders from other federal agencies as well as state, local, tribal and industry representatives. During a response, the designated FOSC oversees response efforts in accordance with ACPs and other industry onshore, offshore, and pipeline facility response plans (FRPs) and vessel response plans (VRPs). FOSCs are authorized to take response measures deemed necessary to protect public health, welfare, and the environment. To do this, the FOSC coordinates and directs responsible party (RP), public, and private sector actions.

ACPs should be reviewed and revised annually, with a resubmittal and approval (by District) of the plan every three years. This cycle should correspond with the National Preparedness for Response Exercise Program (PREP) schedule that requires a major area exercise of the entire plan every three years. After each PREP tabletop and equipment deployment exercise, lessons learned should be incorporated into the revisions at the appropriate Area Committee level. After the triennial PREP Area Exercise, the lessons learned should be incorporated in to a full revision and re-promulgation of the plan for District approval.

Area Committees & Importance of Local Oil Spill Planning

Area Committees represent the core element of oil spill response planning and preparedness for a local COTP Zone. The individuals who attend an Area Committee meeting have the opportunity to meet in a non-emergency setting and learn how best to respond together in the event of a spill. Attendance at Area Committee meetings gives members and their respective organizations the opportunity to assist in the development of the ACP. They participate in the determination of environmentally sensitive areas, geographic response strategies, mitigation methods, and protection priorities. Active participation of dedicated members from the entire spectrum of stakeholders is key to a successful Area Committee. Local government officials, emergency managers and individuals representing non-government organizations (NGOs) should be encouraged to attend Area Committee meetings. Productive discussions and strong partnerships must be cultivated with all stakeholders during the Area Committee process in order to inform a plan that, when implemented, will be adequate to effectively respond to a worst case discharge within that specific COTP Zone.

ACP development is a collaborative process; one that requires consensus decision-making among all Area Committee members. An ACP is not a Coast Guard plan; it is a National Response System plan for implementation at the local level that requires the input and insight of each and every representative on the Area Committee to ensure that information on threats are analyzed,

vulnerabilities identified, environmentally sensitive areas captured, capabilities outlined, protection strategies developed and comprehensive response and recovery procedures included. The development of ACPs is a continuous process; the plan should be viewed as a "living" document that can be updated as needed.

While Area Committee membership is limited to government officials from federal, state, Tribal, and local agencies, the importance of plan holder (industry), oil spill response organization (OSRO), and community NGO participation in Area Committee activities cannot be overemphasized. Area Committees are encouraged to establish forums to obtain advice and guidance from these non-government stakeholders and include them in the decisionmaking process. As described in this job aid, incorporating the WCD scenario information from local OSRPs, FRPs and VRPs is a critical element of the ACP planning process. Having industry and NGO representatives actively engaged in Area Committee discussions and workshops can greatly contribute to the development of a functional and effective ACP. Plan holders can provide the most accurate and up-to-date information on operations from their particular facility or vessel, as well as specifics such as WCD volumes, type of product, etc. OSROs are the primary oil spill resource providers under contract to plan holders. Their knowledge of oil spill equipment, capabilities, and response times is invaluable. Their familiarity with waterways, inlets, staging areas, and other geographic information can greatly contribute to the development of comprehensive response strategies. NGOs can provide awareness of particular environmental concerns, help coordinate volunteer support, and manage wildlife rehabilitation issues.

The Coast Guard has placed a renewed emphasis direction for District and Sector Commanders to develop aggressive outreach programs with States, Parishes, and County officials. The Coast Guard's 2011 Strategic Planning Direction directs Coast Guard COTPs to conduct outreach on the NCP with a focus on environmental and emergency management departments at the state and local level.

Worst Case Discharge (WCD)

Section 1321 (j)(4) of the Federal Water Pollution Control Act (33 U.S.C. 1321) (FWPCA) mandates that Area Committees prepare ACPs that "[w]hen implemented with the National Contingency Plan (NCP), be adequate to remove a WCD, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area."

The FWPCA, amended by OPA 90 and the NCP, further define a WCD as: in the case of a vessel, the loss of its entire cargo of the vessel in adverse weather conditions and in the case of an onshore or offshore facility, the largest foreseeable discharge in adverse weather conditions (emphasis added). "Adverse Weather Conditions" is an undefined term and is dependent on the area of operations of a vessel or location of a facility. Areas subject to hurricanes, ice, or other heavy weather conditions that may impact the ability of oil spill response equipment to operate should plan for these conditions in the ACP.

While VRPs, FRPs, and OSRPs are required to provide for a response to a WCD, the planning volumes established in 33 CFR 154/155 regulations for mechanical recovery equipment apply to Coast Guard regulated facilities and vessels. These volumes cap the amount of equipment that must be identified by contract or other approved means. Similarly, planning volumes for offshore facilities are established by BSEE, and planning volumes for pipelines facilities are established by the Department of Transportation (DOT/PHMSA). Therefore, it is important for Area Committees to encourage these oversight agencies to participate along with their plan holders to ensure complete and accurate assessment of risks and capabilities available. It is important to note, however, that the resources identified within individual VRPs and FRPs (e.g., containment boom, protection boom, etc.) may be insufficient to meet specific requirements in an ACP (which is required to cover the largest WCD for a particular Area).

Next Steps

Coast Guard FOSCs should share this guidance document with their respective Area Committees and continue to make improvements to their ACPs to ensure these plans are updated with the relevant information associated with responses to facility and vessel WCD scenarios. Districts should continue to provide coordination and support to Area Committees and work with RRTs to identify and address gaps and shortfalls. Therefore it is incumbent upon District planning staffs to maintain awareness and conduct comprehensive reviews of all ACPs, work within their respective RRTs to ensure regional awareness and preparedness to identify and cascade oil spill resources, and ramp up response operations as necessary in the face of a major incident.

Districts and COTP zones that include Outer Continental Shelf Lands Act exploration and production (E&P) activities need to include the WCD volume provided for in the OSRPs or Exploration Plans prepared by applicants for a permit issued by BSEE. COTP zones that border on or may be impacted by activities in adjacent country need to establish the WCD volume for those activities as well (e.g., offshore E&P activities off the coast of Canada, Mexico, Russia, or Cuba).

Appendix 9400 – Area Planning Documentation

A. Overview

This portion of the job aid provides a recommended approach and examples to enhance the Area Planning Documentation Appendix of the ACP. It also contains a process that can be used to inform the Area Committee's development of planning assumptions and scenarios in the ACP.

Appendix 9400 is intended to address one of the major preparedness gaps associated with planning assumptions and scenarios that was identified in the joint USCG-BSEE WCD Contingency Plan Analysis Report and the Incident Specific Preparedness Review (ISPR) for the Deepwater Horizon incident.

Appendix 9400 is a critical part of the ACP. In the past, it has been viewed by many merely as a repository for documents with no connection to the main body of the ACP. However, the elements of Appendix 9400 should provide essential information that guides all oil spill planning efforts at the Area Committee level. It provides the planning assumptions, spill scenarios, and discharge release history that allows for risk-based decision-making through a systematic risk assessment process. It also provides a record of past planning efforts that should be built upon when updating and refining planning assumptions and scenarios.

B. Area Committee Coordination

Members of Area Committee and stakeholders with special knowledge of the local Area and potential sources of a WCD from vessels, or onshore or offshore facilities will be instrumental in the development of a comprehensive Discharge and Release History for the local Area, the potential threats to those sources of a WCD, and the development of WCD Planning Assumptions and Planning Scenarios.

C. Elements

The key elements of Appendix 9400 are:

- Oil spill discharge and hazardous substance release history for the local Area;
- A risk assessment that evaluates the potential sources of discharges within the local Area, including WCDs from vessels and facilities;
- A description of planning assumptions describing an assessment of the nature and size of a possible threat, including WCD, and the resources at risk from such an incident; and
- Scenarios that provide for a possible WCD from a vessel, offshore facility, or onshore facility operating in the local Area, as applicable.

The preceding elements captured in Appendix 9400 will assist each Area Committee in developing an Area Contingency Plan that provides guidance for preparing for future incidents while improving the capability to respond to those incidents. A planning process that emphasizes risk-based decision-making ensures focused efforts on the types of incidents that pose the greatest risk without ignoring the

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possibility of and planning for other lesser risk events.

<u>Note</u>: The four elements identified here may be prepared as separate documents that are hyperlinked or referenced within Appendix 9400, as applicable.

9410 Discharge and Release History

Introduction

The following steps are actions to be taken to develop a comprehensive Discharge and Release History for the local Area. The collection of this historical data of significant spills (e.g., location, source, product, amount, responsible party) is the first step in the development of the risk assessment and planning scenarios. It identifies significant spills that have occurred and recognizes the importance of these scenarios in the risk assessment process without compromising the need to identify other scenarios that may occur but have not.

"Significant" spills are defined as oil spill events in the local Area that have resulted in the greatest actual or potential impacts to human health, welfare, and the environment. Significant spills are related to volume, potential volume, actual impact, and potential impact. For example, the largest spill may have had minimal impact (an offshore grounding with no release of oil but with a significant potential release volume). Similarly, a relatively smaller spill may have had significant impact due to its location (a release from a storage tank in an environmentally sensitive area).

It is important to research all significant spills in the local Area, even though they may have occurred prior to the development of many preventative measures, such as double hulls, that may have precluded their occurrence if these measures had been in place. The location, source, product, amount, responsible party, area of coverage, movement of the product, resources impacted, etc., will serve to inform the risk assessment process for planning for future incidents.

The analysis of these significant spills is not designed to be quantitative or probabilistic. Rather, it is to create a narrative of past events in order to identify the elements of those incidents that may be repeated in the future.

STEP	ACTION	✓
1.	List (in a table) all significant spills from all potential sources that have occurred in the local Area that may have impacted the coastal zone for which historical records exist.	
	At a minimum, the USCG MISLE database and pollution reports (POLREPS) should be researched and members of the Area Committee consulted. Webbased research may additionally yield information that can be useful.	
	Note: The Bureau of Ocean Energy Management (BOEM) maintains a database for spills from offshore facilities from 1964 to present. See	

http://www.boemre.gov/incidents/incidentstatisticssummaries.htm. The National Oceanic and Atmospheric Administration's (NOAA's) Office of Response and Restoration also maintains a spill database. See http://www.incidentnews.gov/export. State Environmental Agencies are additional sources of historical oil spill data.

Note: An Example of this table is included in Section D of this job aid.

<u>Note</u>: This is an opportunity to interact with other Federal, State, Local and Tribal stakeholders that may have records that could impact the development of this information.

- 2. Complete an analysis of the significant spills that have occurred in the local Area:
 - a) Use the data developed in Step 1.
 - b) Identify the source (e.g., facility, vessel, etc.) that released the most significant spill(s) in the local Area and primary source of the most frequent spills in the local Area.
 - c) Identify the product released during the most significant spill(s) in the local Area and the most frequent product spilled in the local Area.
 - d) Identify the largest significant spill size and average spill size.
 - e) Identify the location of the most significant spill, resources impacted.
 - f) Determine the areas impacted by significant spills in the local Area and plot these areas.
 - g) Document response measures that were taken during significant spills, including booming and other protection strategies, non-traditional response measures (in situ burning, dispersants, etc.), and identify any issues that arose during the response.

<u>Note</u>: An example of this analysis is included in Section D of this job aid. See Table 2.

9420 Risk Assessment

Introduction

The following are actions to be taken to conduct a Risk Assessment for use in developing an ACP.

A Risk Assessment is the systematic process of evaluating various risk levels for specific hazards identified with a particular task or operation. For purposes of ACP development, the risk assessment will support the development of response strategies and the identification of response resources necessary to implement those strategies. The risk assessment envisioned is not designed to be quantitative or probabilistic. It should create a narrative of potential sources of WCDs, the identity of potential threats to those sources, and the location of higher risk or vulnerable areas.

<u>All</u> possible sources of oil discharges (e.g., vessel, offshore facility, and onshore facility as applicable) that can produce a WCD should be analyzed, including the historical information developed in Section 9410. The WCD for each type of facility or vessel that may impact a local Area should be identified and described. The potential threats to those sources of a WCD should be identified and described and the vulnerable areas in the local Area, including Environmentally Sensitive Areas (ESAs) identified in

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Section 4300, should be referenced.

The process involves laying out the data and then involving members of the Area Committee and other stakeholders with special knowledge of the local Area to use their best professional judgment to create scenarios that may lead to a WCD from vessels, or onshore or offshore facilities. A facilitated meeting with all interested parties has been shown to be effective for this purpose.

A Maritime Security Risk Analysis Model (MSRAM) and the Ports and Waterways Safety Assessment (PAWSA) Workshop that may have been conducted in a port are potential sources for information for this process.

References for conducting a Risk Assessment include the Coast Guard's Risk-based Decision-making Guidelines, COMMANDANT INSTRUCTION 3500.3, OPERATIONAL RISK MANAGEMENT, The Art of the Long View: Planning for the Future in an Uncertain World (Schwartz, 1996), and other similar references are available on the Internet.

STEP	ACTION	✓
1.	Make a determination as to the type of Risk Assessment to utilize. It is recommended that a scenario-based "what if?" analysis as described in the RBDM Guidelines Volume 3 be conducted, but other types of risk assessment may be more appropriate for a particular local Area.	
2.	Use the Planning Scenarios developed in Section 9440 to identify possible sources that may produce a WCD for each category below: Offshore Facilities Onshore Facilities/Pipelines/Marine Terminals Tank Vessels Non-tank Vessels	
	It will be useful to convene a facilitated session of Area Committee members and stakeholders with special knowledge of the local Area and potential sources of a WCD from vessels, or onshore or offshore facilities for this purpose; however, data compiled by the Sector for prevention or enforcement purposes may provide the initial list of potential sources of WCDs.	
	Note: The potential sources (e.g., vessel, offshore facility, or onshore facility as applicable) of a WCD should be described and the possible conditions (e.g., vessel transportation routes, groundings, and collisions, offshore facility hazards such as fire/explosion, pipeline rupture or wellhead failure, or oil terminal situations such as a catastrophic tank collapse that may cause a WCD) should be listed and located on a chart or map.	
3.	Identify and document potential Threats/Causes, such as: Vessel traffic volume and density Channel restrictions or constraints Proximity of large petroleum storage facilities to navigable waters Potential for adverse weather or other potentially adverse	

	·	
	environmental conditions, e.g., flooding	
	Presence of offshore exploration and production activities	
	1	
	It will be useful to convene a facilitated session of Area Committee	
	members and stakeholders with special knowledge of the local Area and	
	potential for threats that may lead to a WCD from vessels, or onshore or	
	offshore facilities.	
	offshore facilities.	
	Note: In identifying these potential threats, it is important that realism be	
	employed but not to the exclusion of creativity. In other words, because	
	an incident has not occurred in the past does not mean that it could not	
	happen in the future. Using experts with special knowledge of the local	
	Area will facilitate a broad expression of views and allow for the	
	exploration or a variety of scenarios that may lead to a WCD.	
4.	Review the Analysis of Previous Incidents/Events conducted under	
٦.	Section 9410.	
	Note: Historical data needs to be supplemented with current discussions	
	with stakeholders, port users, and others. Planners are encouraged to meet	
	with facility operators, pilots, other agencies, etc. to ensure they have	
	updated and current information regarding potential spill sources, causes,	
	and vulnerabilities. The source of early spills, for example, may not be	
	there any more due to economic changes in an Area.	
5.	List the vulnerable areas, including ESAs, identified for Section 4600.	
	Note: This analysis addresses the potential effects of a WCD from all	
	potential sources. Other applicable sections of the ACP should be	
	referenced or hyperlinked where appropriate.	
6.	Determine the Effects.	
J.		

9430 Planning Assumptions

Introduction Below are the actions to be taken to develop Planning Assumptions.

In this section, provide background information that involves a realistic assessment of low probability, high consequence WCD scenarios originating from all potential sources in the area. Planning Assumptions should describe the conditions that could produce a WCD from each potential source. Potential Planning Assumptions include:

- That the weather during the spill event will be particularly poor (e.g., poor visibility and high wind conditions) at the source).
- That the timing of the spill event will be poor (e.g., during bird nesting season).

<u>Note</u>: For AORs that contain offshore facilities, the background information should include current operations and systems, which is a basic description of offshore facility operations and systems used to extract oil in an offshore environment. In addition, the background information should provide system malfunction situation(s) that could produce an actual or potential offshore WCD threat. The Area Committee should coordinate with the BSEE Regional Office to obtain this information regarding this section.

STEP	ACTION	✓
1.	Identify the planning assumptions. These should describe the conditions that could produce a WCD from each potential source. See Section 9430.	
	 This should be conducted for Offshore Facilities Onshore Facilities/Pipelines/Marine Terminals 	
	 Tank Vessels Non-tank Vessels 	
	<u>Note</u> : While pipelines are not traditionally a Coast Guard concerns, it is an important consideration because they may be a potential source in the coastal zone.	
	Level of equipment required to respond to a WCD is predicated on regulation. Operators of vessels and offshore facilities have approved plans that describe the amount of equipment required during a response and list contracted OSROs and other responders, including MWCC and HWCG (or other approved subsea well containment control entities), that have sufficient capability.	
	Include special concerns or considerations for a particular area that is outside of the requirements in the regulations. Addition concerns include: • Managing public expectations and political considerations	
	WCD will likely require additional Coast Guard personnel and other response resources to surge in from other areas. See the Section 4300 (Resources) Job Aid.	
	 WCD will likely result in activation of the RRT WCD will likely be a regionally or nationally significant event 	

9440 Planning Scenarios

Introduction

Below are the actions to be taken to develop Planning Scenarios that provide a description of the WCD.

<u>Note</u>: Regulations require WCD. You need to consider, however, the highest risk, which may be different (because of proximity to the shoreline, for example) than the largest volumetric release.

<u>Note</u>: The Oil Pollution Act of 1990 (OPA 90) mandates that Area Contingency Plans "[w]hen implemented with the National Contingency Plan, be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area."

OPA 90 and the National Contingency Plan (NCP) further define a worst case discharge as: in the case of a vessel, the loss of its entire cargo of the vessel in adverse weather conditions and in the case of an onshore or offshore facility, the largest foreseeable discharge in adverse weather conditions.

"Adverse Weather Conditions" is an undefined term and clearly is dependent on the area of operations of the vessel or facility. It should be acknowledged that the requirements for Vessel Response Plans (VRPs) and Facility Response Plans (FRPs), as well as OSRPs for offshore facilities, are less onerous than the standard set by OPA 90 for ACPs. For example, while VRPs are required to provide for a response to a WCD, the standard is "to the maximum extent practicable." This has been further reduced by EDRC regulations establishing a planning standard that cap the amount of equipment that must be identified by contract or other approved means. ACPs, on the other hand, are required to plan for a WCD without qualification.

At a minimum, ACPs should include the WCD from the largest tank vessel operating in or near the Sector AOR and the largest facility that poses the greatest risk to environmental or economically important areas in or near the Sector AOR. Areas that include offshore oil exploration or production activities need to account for a WCD provided for in the OSRP or Exploration Plan prepared by an applicant for a permit issued by BSEE. Sector AORs that border on or may be impacted by activities of another country need to establish the WCD volume for that activity.

WCD scenarios are generally focused on the largest volume spill event in a particular area. However, it must be noted that spills of lesser volume, but in close proximity to sensitive environmental shorelines or significant economic areas (i.e., nearshore versus offshore as an example) may have an equal or greater impact to the local Area than the largest potential spill volume. Planners should also carefully evaluate the impacts of continuous flow rate spills (such as offshore well blowout) versus finite spill volumes (contents of an oil tanker).

<u>Note</u>: Gulf Oil Spill Response Plans (OSRPs) do not give specific information related to the time to drill a relief well or to cap a well. Current regulations state this time period is 30 days. The durations of these low probability, high consequence events would be impacted by the time it would take to deploy capping equipment (if deepwater or from a floating facility) or to drill a relief well. Additional information on this response timeline can be found in the OSRPs.

9440.1 Offshore Facility WCD Scenario

Introduction

The ACP should provide a description of the notification process between BSEE and the Coast Guard for reporting new or updated OSRPs. The notification process would include an OSRP that has been revised to reflect:

- An initial or new OSRP (for a single facility or groups of facilities covered in the plan) that intends to operate in state and/or federal offshore waters.
- An existing OSRP that reflects an increase to the highest WCD scenario amount contained in the plan.
- An existing OSRP that reflects a decrease in Oil Spill Removal Organization (OSRO) and/or response capabilities for the highest volume worst case scenario.

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Enclosure (1), Notification Process of New or Updated Oil Spill Response Plan (OSRP), includes the policy guidance used by BSSE and the Coast Guard to address the review of new or updated OSRPs, which remain under the jurisdiction of BSEE. The ACP should also describe how the Coast Guard will obtain copies of these OSRPs which contain sensitive information and are securely maintained by BSEE.

The ACP should address how the Coast Guard will review and address deficiencies identified in the respective OSRP after being notified that a new or updated OSRP may have an impact on the WCD documentation listed in this section of the ACP. Following the notification and submittal of the subject OSRP by BSEE, the Coast Guard should review the OSRP and communicate possible plan deficiencies and recommendations to the appropriate BSEE regional office that:

- The OSRP response equipment and strategies are adequate; or
- The OSRP contains response gaps.

After BSEE has been informed of any Coast Guard issues with the respective OSRP, they can address these deficiencies directly with the plan holder.

STEP	ACTION	✓
1.	Consult with BSEE in the review of OSRPs for offshore facilities.	
	Note: After BSEE has notified the Coast Guard and provided access to a new or updated OSRPs for offshore facilities, use the Contingency Plan Preparedness for a Worst Case Discharge Job Aid (Enclosure 2) to assist your unit in reviewing these offshore response plans.	
2.	Identify the facility and specify the type (e.g., jack-up, MODU, fixed structure, etc.) that could cause the largest WCD in their zone.	
	structure, etc.) that could cause the largest web in their zone.	
	Note: The RRT will be sharing a WCD list on a quarterly basis for offshore facilities.	
3.	Determine the type of oil (i.e., describe the characteristics of the oil in the well) of the potential discharge.	
	Note: Some of this information is included in the OSRPs. For example, API Gravity for oil from each Outer Continental Shelf (OCS) facility is included in Appendix A of all Gulf Region OSRPs. Exploration Plans (EPs) and Development Operations Coordination Documents (DOCDs) may contain additional information on oil characteristics.	
	Note: The NOAA SSC will have additional information on the oil characteristics that would complement the information included in the OSRPs. Important characteristics include the physical and chemical properties of oil, such as the specific gravity, viscosity, etc.	
4.	Determine the volume of the potential discharge.	-
	Note: This information is included in the OSRPs.	

5.	Determine the location of the potential discharge.	
	Note: This information is included in the OSRPs.	
6.	Incorporate (by reference or hyperlink) the BSEE spill trajectory model found in the approved OSRP for that facility to help provide potential direction of the spill based on the nature and size of the potential threat and resources at risk.	
	Note: Engage with their regional NOAA SSC to interpret these models. This information should be used to inform Area Committee discussions in the development of WCD scenarios.	
7.	Collate all of the above information into a narrative of the WCD from an Offshore Facility. Include the elements from the preceding steps.	
	Note: This information will be used as part of the risk assessment. See Section 9420.	

9440.2 Onshore Facility/Pipeline/Marine Terminal WCD Scenario

STEP	ACTION	✓
1.	Review FRPs and consult with EPA, DOT/PHMSA, and the State to determine the potential onshore facility sources that could impact the coastal zone.	
2.	Identify the facility/pipeline/marine terminal that could cause the largest WCD in the zone.	
3.	Determine the type of oil (describe the characteristics of the oil in the well) of the potential discharge.	
	Note: Some of this information should be included in the FRPs. However, the NOAA SSC could have additional information on the oil characteristics that would complement the information included in the FRPs. Important characteristics include the physical and chemical properties of oil, such as the specific gravity, viscosity, etc.	
4.	Determine the volume of the potential WCD.	
	Note: This information should be included in the FRPs.	
5.	Record the geographic location (e.g., latitude/longitude, river mile marker) of the potential WCD.	
	Note: This information should be included in the FRPs.	
6.	Engage with the State to determine if a spill trajectory model has been developed for the facility/pipeline/marine terminal that could cause the largest WCD in the zone.	
7.	Engage with the regional NOAA SSC to develop and interpret a spill trajectory model to help provide potential direction of the spill based on the nature and size of the potential threat and resources at risk.	
	<u>Note</u> : This information should be used to inform Area Committee discussions in the development of WCD scenarios.	
8.	Collate all of the above information into a narrative of the WCD from an Onshore Facility. Include the elements from the preceding steps.	

Note: This information will be used as part of the risk assessment. See	
Section 9420.	

9440.3 Tank Vessel WCD Scenario

STEP	ACTION	✓
1.	Review the list of tank vessels that service facilities within the local Area and determine the vessel that could cause the largest Tank Vessel WCD in the zone.	
	Note: The Advanced Notice of Vessel Arrival (ANOVA) screening process is a valuable tool in making this determination. This information should be reviewed regularly to ensure that the current vessels servicing the local Area accurately reflects the largest Tank Vessel WCD in the zone.	
2.	Record the largest Tank Vessel that could cause the largest WCD in the zone.	
3.	Determine the type of oil (i.e., describe the characteristics of the oil cargo) of the potential discharge.	
	Note: This information should be included in the ANOVA process. The NOAA SSC could have additional information on the characteristics of oil. Important characteristics include the physical and chemical properties of oil, such as the specific gravity, viscosity, etc.	
4.	Determine the volume of the potential discharge. Note: This information should be included in the ANOVA process.	
5.	Record the higher risk areas for tank vessel traffic (e.g., latitude/longitude, river mile marker) that could be the location of the potential WCD.	
	Note: This information would be determined as part of the risk assessment process. See Section 9420.	
6.	Engage with the regional NOAA SSC to develop and interpret a spill trajectory model to help provide potential direction of the spill based on the nature and size of the potential threat and resources at risk.	
	Note: This information should be used to inform Area Committee discussions in the development of WCD scenarios.	
7.	Collate all of the above information into a narrative of the WCD from a Tank Vessel. Include the elements from the preceding steps.	
	Note: This information will be used as part of the risk assessment. See Section 9420.	

9440.4 Non-tank Vessel WCD Scenario

STEP	ACTION	✓
1.	Review the list of non-tank vessels that service facilities within the local	
	Area and determine the vessel that could cause the largest non-Tank	

	Vessel WCD in the zone.	
	Note: For non-tank vessels, the size of the potential release may not be as important as the location of the spill. The areas of transit for non-tank vessels may be different than tank vessels; therefore, it is important to determine the nature and size of the potential threat and the resources at risk for Non-Tank Vessel WCD.	
	The vessel critical profile (found in MISLE) is a valuable tool in making this determination. This information should be reviewed regularly to ensure that the current vessels servicing the local Area accurately reflects the largest Non-Tank Vessel WCD in the zone.	
2.	Record the largest Non-Tank Vessel that could cause the largest WCD in the zone.	
3.	Determine the type of oil (describe the characteristics of the fuel oil) of the potential discharge.	
	Note: This information should be included in the vessel critical profile (found in MISLE). The NOAA SSC could have additional information on the characteristics of the fuel oil. Important characteristics include the physical and chemical properties of fuel oil, such as the specific gravity, viscosity, etc.	
4.	Determine the volume of the potential discharge.	
	Note: This information should be included in the vessel critical profile (found in MISLE).	
5.	Record the higher risk areas for non-tank vessel traffic (e.g., latitude/longitude, river mile marker) that could be the location of the potential WCD.	
	Note: This information would be determined as part of the risk assessment process. See Section 9420.	
6.	Engage with the regional NOAA SSC to develop and interpret a spill trajectory model to help provide potential direction of the spill based on the nature and size of the potential threat and resources at risk. This information should be used to inform Area Committee discussions in the development of WCD scenarios.	
7.	Collate all of the above information into a narrative of the WCD from a Non-tank Vessel. Include the elements from the preceding steps.	
	Note: This information will be used as part of the risk assessment. See Section 9420.	

D. Examples Below are examples of the different elements of Appendix 9400:

Section 9410 Examples

- Table 1: Local Area Spill History
- Table 2: Analysis of Spill History
- Table 3: Largest Potential Spill Size

Section 9420 Examples

• Example Risk Assessment

Section 9440 Examples

- 9450.1 Introduction to Planning Scenarios
- 9450.2 Onshore Facility/Pipeline/Marine Terminal WCD Scenario
- 9450.3 Tank Vessel WCD Scenario

9410 Examples

Table 1: Local Area Spill History

11/1/79	Date	Location	Source	Product	Amount
RIVER	11/1/79	REDFISH IS.	Tank Ship	CRUDE OIL	255,000
8/28/84 SAN JACINTO RIVER Pipeline CRUDE OIL 3,818 5/2/85 AMERADA HESS Pipeline JP-5 1,500 1/31/86 REDFISH IS. T/B GASOLINE 525 6/23/89 BAYPORT CHANNEL T/B SLURRY OIL 6,000 3/25/90 REDFISH IS. T/B CRUDE CONDENSATE 1,310 6/8/90 LIGHTERING AREA Tank Ship CRUDE OIL 92,860 8/12/90 CHOCOLATE BAYOU #6 OIL 1,200 8/17/90 REDFISH IS. T/B CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 </td <td>7/14/84</td> <td></td> <td>Pipeline</td> <td>#6 OIL</td> <td>1,190</td>	7/14/84		Pipeline	#6 OIL	1,190
RIVER S/2/85 AMERADA HESS Pipeline JP-5 1,500 1/31/86 REDFISH IS. T/B GASOLINE 525 6/23/89 BAYPORT T/B SLURRY OIL 6,000 CHANNEL 3/25/90 REDFISH IS. T/B CRUDE CONDENSATE 1,310 6/8/90 LIGHTERING AREA Tank Ship CRUDE OIL 92,860 8/12/90 CHOCOLATE T/B #6 OIL 1,200 8/17/90 REDFISH IS. T/B CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO T/B GASOLINE 1,500 10/18/94 SAN JACINTO T/B GASOLINE 500 10/20/94 SAN JACINTO T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	7/30/84	REDFISH IS.	M/V	CRUDE OIL	67,000
1/31/86 REDFISH IS. T/B GASOLINE 525 6/23/89 BAYPORT CHANNEL T/B SLURRY OIL 6,000 3/25/90 REDFISH IS. T/B CRUDE CONDENSATE 1,310 6/8/90 LIGHTERING AREA Tank Ship CRUDE OIL 92,860 8/12/90 CHOCOLATE BAYOU #6 OIL 1,200 8/17/90 REDFISH IS. T/B CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B GASOLINE 500 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 </td <td>8/28/84</td> <td></td> <td>Pipeline</td> <td>CRUDE OIL</td> <td>3,818</td>	8/28/84		Pipeline	CRUDE OIL	3,818
6/23/89 BAYPORT CHANNEL T/B SLURRY OIL 6,000 3/25/90 REDFISH IS. T/B CRUDE CONDENSATE 1,310 6/8/90 LIGHTERING AREA Tank Ship CRUDE OIL 92,860 8/12/90 CHOCOLATE BAYOU T/B #6 OIL 1,200 8/17/90 REDFISH IS. T/B CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 O	5/2/85	AMERADA HESS	Pipeline	JP-5	1,500
CHANNEL	1/31/86	REDFISH IS.	T/B	GASOLINE	525
6/8/90 LIGHTERING AREA Tank Ship CRUDE OIL 92,860 8/12/90 CHOCOLATE BAYOU T/B #6 OIL 1,200 8/17/90 REDFISH IS. T/B CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK	6/23/89		T/B	SLURRY OIL	6,000
8/12/90 CHOCOLATE BAYOU T/B #6 OIL 1,200 8/17/90 REDFISH IS. T/B CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	3/25/90	REDFISH IS.	T/B	CRUDE CONDENSATE	1,310
BAYOU CRUDE OIL 16,476 9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	6/8/90	LIGHTERING AREA	Tank Ship	CRUDE OIL	92,860
9/6/91 HIGH ISLAND Pipeline CRUDE OIL 900 7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B GASOLINE 500 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	8/12/90		T/B	#6 OIL	1,200
7/17/92 TEXAS CITY M/V CRUDE OIL 2,350 2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B GASOLINE 500 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	8/17/90	REDFISH IS.	T/B	CRUDE OIL	16,476
2/18/94 SAN JACINTO RIVER T/B GASOLINE 1,500 10/18/94 SAN JACINTO RIVER T/B GASOLINE 500 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	9/6/91	HIGH ISLAND	Pipeline	CRUDE OIL	900
RIVER	7/17/92	TEXAS CITY	M/V	CRUDE OIL	2,350
RIVER CRUDE OIL 10/20/94 SAN JACINTO RIVER T/B CRUDE OIL 35,715 1/23/95 DEER PARK Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	2/18/94		T/B	GASOLINE	1,500
RIVER Oil handling facility LUBE OIL 1,000 2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	10/18/94		T/B	GASOLINE	500
2/5/95 LIGHTERING AREA Container Ship #6 OIL 898 9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	10/20/94		T/B	CRUDE OIL	35,715
9/25/95 TRINITY BAY T/B WASTE OIL 1,012 3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	1/23/95	DEER PARK		LUBE OIL	1,000
3/10/96 DEER PARK Tank Ship PROCESSED GAS OIL 1,492 3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	2/5/95	LIGHTERING AREA	Container Ship	#6 OIL	898
3/18/96 REDFISH IS. T/B #6 OIL 4,200 5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	9/25/95	TRINITY BAY	T/B	WASTE OIL	1,012
5/26/96 TRINITY BAY T/B #6 OIL 619 8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	3/10/96	DEER PARK	Tank Ship	PROCESSED GAS OIL	1,492
8/6/96 REDFISH IS. T/B COKER FEED STOCK 200	3/18/96	REDFISH IS.	T/B	#6 OIL	4,200
	5/26/96	TRINITY BAY	T/B	#6 OIL	619
9/30/96 TRINITY BAY Tank Ship CRUDE OIL 1,350	8/6/96	REDFISH IS.	T/B	COKER FEED STOCK	200
	9/30/96	TRINITY BAY	Tank Ship	CRUDE OIL	1,350

2/23/97	DEER PARK	Container Ship	LUBE OIL	150
1/17/98	TRINITY BAY	T/B	CRUDE CONDENSATE	144
1/18/98	LIGHTERING AREA	T/B	CRUDE OIL	1,000
1/21/98	LIGHTERING AREA	Tank Ship	CRUDE OIL	600
8/1/98	REDFISH IS.	Passenger Vessel	DIESEL	179
8/6/98	REDFISH IS.	T/B	ASPHALT	200
9/10/98	GICW & OLD BRAXOS	T/B	CRUDE OIL	100
10/7/98	HUNTING BAYOU	Terminal	DIESEL	205
6/25/99	DEER PARK	Pipeline	KEROSENE	355
6/28/99	ALEXANDER ISLAND	Pipeline	CRUDE OIL	1,000
11/10/04	TEXAS CITY	T/B	JP-5	6400
8/17/05	CHOCOLATE BAYOU	T/B	JP-5	7150
12/4/05	HIGHLAND BAYOU	Pipeline	DIESEL	350

Table 2: Analysis of Spill History

Source of Largest Spill	Product Released during the Largest Spill	Amount of Largest Spill (BBLS)	Source Of Most Frequently Spilled Product	Most Frequently Spilled Product	Location of Most Frequently Spilled Product	Average Spill Size (BBLS)
M/V	Crude Oil	255,000	M/V	Crude Oil (13/37 or 35%)	Redfish Island (9/37 or 24%)	14,000

Note: Data included in Table 2 is based on information presented in Table 1.

Table 3: Largest Potential Spill Size

A. Tank Ship/Tank Barge (largest ship that operates in the local Area)

Name of Vessel	Cargo Capacity	Cargo Type

B. Non-tank Vessel

Name of Vessel	Oil Carrying Capacity	Oil Type

C. Onshore Facility (including pipelines)

Name of Facility	Location	Storage Capacity or Pipeline Volume	Cargo Type

D. Offshore E&P Facility

Name of Facility	WCD by OOSR	Location

Appendix 9400

Section 9420: Example Risk Assessment

SPE Risk Assessment Model (i.e., Risk = Severity x Probability x Exposure) informs the prioritization of hazards in the local Area (i.e., from the highest to the lowest risk).

Severity: Severity is an event's potential consequences measured in terms of degree of damage, injury, or impact on the environment. Should something go wrong, the results are likely to occur in one of these areas:

- Injury or Death
- Loss of Cargo
- Uncontrolled Well Blowout
- Adverse Publicity
- Serious Environmental and/or economic impacts

Severity can vary from 1 to 5:

- 1 =None or slight
- 2 = Minimal
- 3 = Significant
- 4 = Major
- 5 = Catastrophic

Probability: Probability is the likelihood that the potential consequences will occur.

Probability can vary from 1 to 5:

- 1 = Impossible or remote under any conditions
- 2 = Unlikely under normal conditions
- 3 = About 50-50
- 4 = Greater than 50%
- 5 = Very likely to happen

Exposure: Exposure is the amount of time, number of occurrences, number of people, and/or amount of equipment involved in an event, expressed in time, proximity, volume, or repetition.

Exposure can vary from 1 to 4:

- 1 =None or below average
- 2 = Average
- 3 = Above average
- 4 = Great

Compute the risk values using the formula $Risk = S \times P \times E$. The resulting scores will be between 1 and 100:

Values - Degree of Risk

80-100 - Very High

60-79 – High

40-59 - Substantial

20-39 – Possible

1-19 - Slight

After computing the risk values for each hazard identified using the formula Risk = $S \times P \times E$, you can order the hazards from the highest to the lowest risk. This will allow you to focus first on the areas of most concern in conditions of limited resources. WCD planning scenarios should be developed for all hazards scoring 60 or greater.

Section 9440: Example Planning Scenarios

9440.1 Introduction to Planning Scenarios

The worst case discharge (WCD) scenario for the Area Committee is a catastrophic failure of a 250,000 barrel tank of #6 fuel oil at Port Manatee, with 50,000 bbls escaping via mosquito ditch to the bay. When developing the scenario for the WCD, the Area Committee examined the potential for a spill by both vessels and facilities. Because the situations are so different, but the potential amount can be virtually identical, the Area Committee developed scenarios for the both a vessel and facility incident.

9440.2 Onshore Facility/Pipeline/Marine Terminal WCD Scenario

Overview:

Source of Onshore WCD	Product Released during WCD	Amount of WCD (BBLS)	Geographic Location of WCD (lat/long)
Failure of Port Manatee	#6 Fuel Oil	50,000	Lat: 27.6385
Storage Tank			Lon: -82.55716

<u>Summary</u>: The WCD Onshore Facility scenario is a catastrophic failure of a 250,000 barrel tank of Number #6 fuel oil at Port Manatee. Number 6 fuel oil (MSDS No. 9907) is Fuel oil #6 is a petroleum distillate fraction with a boiling point >400 degrees F. Fuel oil No. 6 is the highest boiling fraction of the heavy distillates from petroleum. No. 6 oils represent approximately 5 to 8% of the original crude petroleum, but the exact yield depends on the source, refinery design and operations, and product requirements. Number #6 fuel oil is persistent in environment, has low evaporation rate, is a remote fire hazard, and is a personnel exposure hazard as the product is heated.

A catastrophic spill at Port Manatee would impact virtually all of Tampa Bay, as the tide dispersed the oil. Many resources (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Gulf beaches. In the southern bay area, Port Manatee is considered to be the most probable spill site because of the large amount of vessel amount of vessel movement and bulk product storage. Port Manatee is located in one of the most environmentally sensitive areas of Tampa Bay, amid the Cockroach Bay Aquatic Preserve to the north and Bishop's Harbor and Terra Ceia Aquatic Preserve to the south.

<u>Seasonal considerations</u>: Tide/current effects are assumed to be worse in the spring (reference Coast Pilot Tampa Bay weather section). The worst time of year for a spill in this area is the winter because of low water levels, exceptionally strong currents, strong northeast winds and inaccurate tide projections. Although fog poses a hazard in the winter months, the numerous and violent thunderstorms that occur during the summer are assumed to pose a greater hazard because of the suddenness with which they can materialize and the extreme conditions that exist during the storms.

Planning Scenario Specifics:

<u>Situation</u>: A total structural failure of a storage tank, product breaches the berm and enters Tampa Bay via a mosquito ditch adjacent to the bermed area. The potential exists for the majority of the product to leave the bermed area.

Type and amount of spill: 250,000 barrels of #6 oil, 50,000 barrels escape into Tampa Bay before mosquito control ditch is closed off.

<u>Can pollution source be secured?</u>: No, however earthmoving equipment will be mobilized to dam up the mosquito control ditch to lessen the quantity of oil entering Tampa Bay.

Sensitive areas at risk: Bishop's Harbor, Cockroach Bay Aquatic Preserve, Pinellas and Manatee beaches, Pinellas County Aquatic Preserve, Terra Ceia Aquatic Preserve, Tierra Verde/Ft. DeSoto, southeast St. Petersburg. Within the first ½ hour an exposure problem will exist because the product is heated (reference MSDS), the entire area will be shut down.

Time of the year: Summer

On-scene weather: During the day a typical July/August pattern exists with morning winds from the SE at 10-15 knots, moving westerly at 10-15 knots around 1400. In the late afternoon (approximately1700-1800) storms form over land and move WNW with winds gusting 35-45 knots. There is a strong potential for sudden gusts to top 60 knots in addition to waterspouts and tornadoes. Once the storm passes, the winds go back to light and variable from the ESE. The overnight air temperature drops 15- 20 degrees in less than an hour when the storm hits. This creates adverse weather and greater potential for tornadoes.

9420.3 Tank Vessel WCD Scenario

Overview:

Source of Tank Vessel WCD	Product Released during WCD	Amount of WCD (BBLS)	Geographic Location of WCD (lat/long)
Tank Ship	#6 Fuel Oil	1,000,000	Lat: 27.630556, Long: -82.613889

<u>Summary</u>: The WCD Vessel scenario is a collision 2 nautical miles NE of the Sunshine Skyway Bridge, at the intersection of Tampa Ship Channel Cut A and Cut B (pos. 27_37.50' N, -82_36.50' W). An inbound 1,000,000 barrel tank ship carrying #6 oil collides with an outbound container vessel, resulting in a total loss of cargo (1,00,000 barrels) on board the tank ship. This collision occurs during heavy weather, on a holiday weekend, involving a foreign vessel, with no local contacts adjacent to a bridge that may need to be closed to vehicular traffic. Number 6 fuel oil (MSDS No. 9907) is Fuel oil #6 is a petroleum distillate fraction with a boiling point >400 degrees F. Fuel oil No. 6 is the highest boiling fraction of the heavy distillates from petroleum. No. 6 oils represent approximately 5 to 8% of the original crude petroleum, but the exact yield depends on the source, refinery design and operations, and product requirements. Number #6 fuel oil is persistent in environment, has low evaporation rate, is a remote fire hazard, and is a personnel exposure hazard as the product is heated.

A catastrophic spill at the junction of Cut "A" and Cut "B" would impact virtually all of Tampa Bay as well as the area between the Sunshine Skyway and Egmont Key. In the southern bay area, Port Manatee is considered to be

the most probable spill site because of the large amount of vessel movement and bulk product storage. Port Manatee is located in one of the most environmentally sensitive areas of Tampa Bay, amid the Cockroach Bay Aquatic Preserve to the north and Bishop's Harbor and Terra Ceia Aquatic Preserve to the south. As the spill spreads out on the tide(s,) many resources noted above (e.g., mangroves, sea grass, recreational and commercial fisheries, bird rookeries, marine mammals, shellfish, benthic community, and aquatic preserves, etc.) would be at risk, as well as the Gulf beaches and inland waters (e.g., Boca Ciega Bay).

<u>Seasonal considerations:</u> Although fog poses a hazard in the winter months, the numerous and violent thunderstorms that occur during the summer are assumed to pose the greater hazard because of the suddenness with which they can materialize and the extreme conditions that exist during the storms.

Planning Scenario Specifics:

<u>Situation</u>: One inbound foreign tank ship vessel carrying 1,000,000 barrels of #6 oil collided with another vessel resulting in the total loss of cargo from the tank ship.

<u>Location</u>: The junction of Cut "A" and Cut "B", approximately 2 nautical miles NE of the Sunshine Skyway Bridge.

Type and amount of spill: 1,000,000 barrels of #6 oil.

Can pollution source be secured?: No

Sensitive areas at risk: See above

Time of the year: Summer

On-scene weather: During the day, a typical July/August pattern exists with morning winds from the SE at 10-15 knots, moving westerly at 10-15 knots about 1400. Late afternoon, approximately 1700-1800, a storm forms over land and moves WNW with wind gusting 35-45 knots (potential exists for sudden gusts to top 60 knots). Potential exists for waterspouts and tornadoes storm passes and the winds go back to light and variable from the ESE overnight, air temperature drops 15-20 degrees in less than an hour when the storm hits.

Policy on U.S. Coast Guard Review of an Oil Spill Response Plan (OSRP) for Offshore Facilities under the Jurisdiction of the Bureau of Safety and Environmental Enforcement

This enclosure provides BSEE and USCG roles, responsibilities, and points of contacts used by Regional BSEE offices to notify the respective Coast Guard office that a new or updated OSRP which may impact the WCD planning documentation contained in Section 9430.11 to Appendix 9400 of the ACP. The information listed in the enclosure should be incorporated into Section 9430.110 as applicable.

A. BSEE Responsibilities

- 1. Notify USCG POC within five working days of receipt of:
 - a. Initial OSRPs for operations in state and/or federal offshore waters
 - b. An OSRP that has been revised to reflect:
 - i. An increase to the highest volume worst case discharge scenario contained in the plan.
 - ii. A decrease in OSRO and/or response capabilities for the highest volume worst case scenario.
- 2. Provide digital copies of subject OSRPs to USCG POC until web portal for USCG access is established.
- 3. Review USCG-identified OSRP deficiencies and, if appropriate, communicate the deficiencies to plan holder with a request for modification.
- 4. Confirm and document that appropriate USCG recommendations are addressed in a revision to the OSRP.
- 5. Attach all USCG communications to permanent record in TIMS and/or other OSRP file(s).

B. USCG Responsibilities

- Using the USCG/BSEE Contingency Plan Preparedness for a WCD Job Aid, conduct review of response
 equipment, personnel requirements, and strategies for the highest volume WCD scenario contained in the
 OSRP
- 2. Within five working days of receipt of copy of an OSRP, communicate findings and recommendations via email to BSEE POCs in region when:
 - i. Response equipment and strategies are adequate. If adequate, communication should so state.
 - ii. Response gaps are identified. If gaps, communication should include detailed information on deficiencies and suggested remedies. (General comments will not be considered.).
 - iii Update ACP as necessary.

BSEE Regional Points of Contact:

BSEE Alaska OCS Region Ms. Christy Bohl 903-334-5309 Christy.Bohl@bsee.gov

BSEE Gulf OCS Region Mr. Mike Tolbert 504-736-2529 Mike.Tolbert@bsee.gov

BSEE Pacific OCS Region Mr. Craig Ogawa 805-389-7569 Craig.Ogawa@bsee.gov

Appendix 9400

U.S. Coast Guard Points of Contact: (Identify POC information as necessary)

District 17

Sector Anchorage

Sector Juneau

District 11

Sector Los Angeles/Long Beach

District 8

Sector Mobile

Sector New Orleans

MSU Morgan City

Sector Houston-Galveston

MSU Port Arthur

Sector Corpus Christi





United States Coast Guard Bureau of Safety and Environmental Enforcement

Contingency Plan Preparedness for a Worst Case Discharge Job Aid

Part 1 - Operating Area

U.S. Coast Guard (USCG)	Bureau of Safety and Environmental Enforcement (BSEE)				
□ Atlantic Area □ Pacific Area	☐ Gulf of Mexico Outer Continental Shelf (OCS) Region ☐ Pacific OCS Region ☐ Alaska OCS Region				
□ District 8 □ District 11 □ District 17	- Indian o es region				
 □ Sector Mobile □ MSU Morgan City □ MSU Port Arthur □ Sector Houston-Galveston □ Sector Corpus Christi □ Sector Anchorage 					
Environmental Prot	ection Agency (EPA)				
□ Region IV □ Region VI	□ Region IX □ Region X				
Part 2 – Contingency Plan Information					
☐ Single Facility Covered by an Oil Spill Response ☐ Group of Facilities Covered by an: Plan (OSRP) Under Jurisdiction of BSEE					
` '	□ Regional OSRP □ Sub-regional OSRP				
A <i>Facility</i> means any structure, group of structures, equipment, or device purposes: Exploring for, drilling for, producing, storing, handling, transports and their associated pipelines defined by the Deepwater Port Act opurposes. A mobile offshore drilling unit is classified as a facility wher	ferring, processing, or transporting oil. The term excludes deep-water of 1974, but included other pipelines used for one or more of these				
A <i>regional OSRP</i> is a plan that covers all of an owner/operator's existing pipeline right-of-ways (ROW) within a given BOEMRE region.	ng OCS oil handling, storage, or transportation facilities, leases, and				
A <u>sub-regional OSRP</u> is a plan that covers an owner/operator's leases a requirements for the state.	and facilities in areas that affect the state of Florida and meets regulatory				
Complete Part 2 below and Part 3.	Compete Part 2 below and Part 4.				
Owner/Operator of Facility	Owner/Operator of Group of Facilities				
Applicable Area Contingency Plan (ACP)	Area Committee Name				

Directions: This electronic job aid will be used by to complete the required plan review, reporting, and the corresponding worst case discharge (WCD) contingency plan gap analysis. Plan reviewers should use this job aid to document the results of the plan review and WCD contingency plan gap analysis in order to report on the current status whether the applicable contingency plan considered all actions necessary to mitigate a WCD from an offshore facility. WCD planning factors will be based on applicable regulations found in Title 40 CFR Part 300, Title 30 CFR Part 254, and applicable Coast Guard and BSEE policy guidance. Plan reviewer should electronically fill in the appropriate boxes accurately describing the results of each plan under review. When choosing the appropriate box, SUBSTITUTE the "\sum "symbol with the "\sum "symbol."

Part 3 – Review of OSRP WCD Scenarios (for single facility) Under the Jurisdiction of the BSEE

Reference	Requirement	Yes	No
	General Information		
30 CFR § 254.3	Does the response plan cover more than one facility? If Yes, go to Part 4 and begin with question # 6. If No, complete this part.	-	
30 CFR § 254.4	2. Does the response plan reference other documents? If Yes, highlight only those documents referenced from the list below. NCP ACP MMS Environmental Documents Oil Spill Removal Organization (OSRO) Documents	0	0
30 CFR § 254.5(b)	3. Does the response plan state it is consistent with the NCP and the appropriate ACP?		
30 CFR § 254.2(a)	4. Does the response plan identify the facility covered by the plan, including its location and type? If Yes, list the <u>facility</u> , its <u>location</u> , and <u>type</u> below. Facility Name: Location: Type:		0
Det	ermining Volume of Oil for Worst Case Discharge Scenar	rio	
30 CFR § 254.47	5. Does the response plan list the highest volume of oil of the WCD scenario? If Yes, list the total sum of the largest WCD scenario (stated in "barrels of oil released/day.") Less than 10 Mile WCD Exploratory Drilling WCD WCD Scenario Volume WCD Scenario Volume Do not move on to Part 5 until the highest WCD scenario volume is identified. Note: The area contingency plan preparedness assessment can continue after the highest WCD scenario volume has been identified for each applicable Coast Guard COTP Zone. Complete Part 1 – 3 for each single facility OSRP. Complete Part 1 – 2 and Part 4 for OSPRs covering more than one facility. Complete Part 5 – 7 when the largest WCD scenario volume has been identified.		

 $Part\ 4-Review\ of\ Regional\ and\ Sub-regional\ OSRP\ WCD\ Scenarios\ (for\ group\ of\ facilities)\ Under\ the\ Jurisdiction\ of\ the\ BSEE$

Reference	Requirement	Yes	No			
General Information						
This part addresses the apprequirements found in 30 C	licable response plan descriptions that should be addressed in a regional and sub-regional OFR Part 254.	SRP which 1	neets the			
30 CFR § 254.3;	6. Does the response plan cover more than one facility?					
MMS GOMR NTL No. 2006-G21	If Yes, complete this part.					
	If No, go to Part 3 and begin with question #1.					
	7. Does the response plan reference other documents?					
	If Yes, highlight only those documents referenced from the list below.					
30 CFR § 254.4	□ NCP □ ACP					
	☐ MMS Environmental Documents					
	☐ Oil Spill Removal Organization (OSRO) Documents					
30 CFR § 254.5(b)	8. Does the response plan state it is consistent with the NCP and the appropriate ACP?					
Det	ermining Volume of Oil for Worst Case Discharge Scenar	rio				
	9. Does the OSRP list the volume of oil for the WCD?					
	If Yes, list the total sum of the largest WCD scenario (stated in "barrels of oil released/day.").					
	Totascorday.).					
	Less than 10 Mile WCD					
	Greater Than 10 Mile WCD					
	Exploratory Drilling WCD					
30 CFR § 254.47; MMS GOMR NTL No.	WCD Scenario Volume:					
2006-G21- Appendix H	STOP	_	_			
	Do not move on to Part 5 until the <u>highest WCD scenario volume</u> is identified.					
	Note: The area contingency plan preparedness assessment can continue after the highest WCD scenario volume has been identified for each applicable Coast Guard COTP Zone.					
	 Complete Parts 5 – 7 when the largest WCD scenario volume has been identified. 					

Part 5 – Review of Area Contingency Plan (ACP) WCD Planning Assumptions and Scenarios

Reference	Requirement	Yes	No
General Information			
40 CFR § 300; COMDTINST 16471.3, Appendix 9400	10. Does the ACP include WCD planning assumptions and scenarios from all potential sources of oil discharges within the respective COTP Zone? If Yes, list sources of WCD. Vessel Onshore Facility Offshore Facility If No, go to and complete Question 11 below.		
Determining Volume of Oil for Worst Case Discharge Scenario			
40 CFR § 300; COMDTINST 16471.3, Appendix 9400	11. Does the ACP list the volume of oil included in the WCD planning assumptions and scenarios from the sources listed above? If Yes, list the total sum of the WCD scenario. Vessel Onshore Facility If No, use the largest WCD scenario amount identified in Part 3 or in Part 4 as applicable.		
40 CFR § 300; COMDTINST 16471.3, Appendix 9400	 12. If Yes was answered above, does the listed volume of oil in the ACP WCD planning assumptions and scenarios equal or exceed the largest WCD scenario amount identified in Part 3 or in Part 4 as applicable? If Yes, go to Part 6 and begin completing the preparedness gap analysis. If No, use the <u>largest WCD scenario amount</u> identified in Part 3 or in Part 4 as applicable, and then go to Part 6 to begin completing the preparedness gap analysis. 		

Part 6 – An Assessment of the OSRP Largest WCD Scenario Planning Factors

<u>Note</u>: This part should be completed only after determining the <u>largest WCD scenario amount</u> listed in the applicable OSRP for a single facility or the applicable Regional or Sub-regional OSRP for the group of facilities identified in the previous parts.

Reference	Requirement	Yes	No	
	Required Worst Case Discharge Scenario Information			
30 CFR § 254.26(a)	13. Does the response plan provide a list of assumptions made and the supporting calculations used to determine the largest WCD scenario volume?		0	
30 CFR § 254.26(b)	14. Does the response plan provide a trajectory analysis specific to the area in which the facility is located? If Yes, go to question 15. If No, identify as a contingency plan gap.	0	0	
30 CFR § 254.26(b)	15. Does the response plan trajectory analysis identify onshore and offshore areas that a discharge potentially could affect?If Yes, go to question 16.If No, identify as a contingency plan gap.	0	0	
30 CFR § 254.26(b)	16. Does the response plan provide a trajectory analysis that reflects the maximum distance from the facility that oil could move in a time period that it reasonably could be expected to persist in the environment? If Yes, go to question 17. If No, identify as a contingency plan gap.	0		
30 CFR § 254.26(c)	17. Does the response plan provide a list of the resources of special economic or environmental importance that potentially could be impacted in the areas identified by the trajectory analysis reflected in questions 14-16 above? If Yes, list the applicable ACP(s). Area Contingency Plan(s) If No, identify as a contingency plan gap.			

Reference	Requirement	Yes	No
	Required Worst Case Discharge Scenario Information		
30 CFR § 254.26(d)	18. Does the response plan provide a discussion of how to respond to the WCD scenario in adverse weather conditions?		
	If Yes, go to question 19.		
	If No, identify as a contingency plan gap.		
	19. Does the discussion provide a description of the response equipment that will be used to contain and recover the discharge to the maximum extent practicable?		
30 CFR § 254.26(d)(1)	If Yes, go to question 20.		
	If No, identify as a contingency plan gap.		
	20. Does the description include the types, location(s) and owner, quantity, and capabilities of the equipment?		
30 CFR § 254.26(d)(1)	If Yes, go to question 21.		
	If No, identify as a contingency plan gap.		
	21. Does the description include the effective daily recovery capabilities, where applicable?		
30 CFR § 254.26(d)(1)	If Yes, go to question 22.		
	If No, identify as a contingency plan gap.		
	22. Does the calculation of the effective daily recovery capabilities use the methods described in §254.44?		
30 CFR § 254.26(d)(1)	If Yes, go to question 23.		
	If No, identify as a contingency plan gap.		
20 GED 8 254 444	23. Does the calculation use the effective daily recovery capacity of the equipment by multiplying the manufacturer's rated throughput capacity over a 24-hour period by 20 percent?		
30 CFR § 254.44(a)	If Yes, go to question 24.		
	If No, identify as a contingency plan gap.		
	24. Does the calculated rate determine that sufficient recovery capacity is available to respond to the WCD?		
30 CFR § 254.44(a)	If Yes, go to question 25.		
	If No, identify as a contingency plan gap.		
30 CFR § 254.26(d)(1)	25. If the largest WCD scenario amount involves a drilling rig or production facility, does the WCD scenario show how the owner/operator will cope with the initial spill volume upon arrival at the scene, and then support operations for a blowout lasting 30 days?		
	If Yes, go to question 26.		
	If No, identify as a contingency plan gap.		

Reference	Requirement	Yes	No
	Required Worst Case Discharge Scenario Information		
30 CFR § 254.26(d)(2)	26. Does the response plan include a description of the personnel, materials, and support vessels that would be necessary to ensure that the identified response equipment is deployed and operated properly and effectively? If Yes, go to question 27. If No, identify as a contingency plan gap.	0	0
30 CFR § 254.26(d)(2)	27. Does the description include the location and owner of the resources as well as the quantities and types, if applicable? If yes, go to question 28. If No, identify as a contingency plan gap.	_	0
30 CFR § 254.26(d)(3)	28. Does the response plan provide a description of the oil storage, transfer, and disposal equipment? If Yes, go to question 29. If No, identify as a contingency plan gap.	0	0
30 CFR § 254.26(d)(3)	29. Does the description include the types, location and owner, quantity, and capabilities of the equipment? If Yes, go to question 30. If No, identify as a contingency plan gap.		
30 CFR § 254.26(d)(4)	30. Does the description include an estimation of the individual times needed for: Procurement of the identified containment, recovery, and storage equipment; Procurement of equipment transportation vessel(s); Procurement of personnel to load and operate the equipment; Equipment load-out [transfer of equipment to transportation vessel(s)]; Travel to the deployment site (including any time required for travel from an equipment storage area); and Equipment deployment. If No, identify as a contingency plan gap. Use the information obtained in Part 6 to help complete Part 7.		

Part 7 – An Assessment of the ACP WCD Planning Assumptions and Scenarios

<u>Note</u>: This part should be completed only after completing Part 6 in order to determine WCD contingency plan gaps for the applicable ACP.

Reference	Requirement	Yes	No
W	orst Case Discharge Planning Assumptions and Scenarios	S	
40 CFR § 300; COMDTINST 16471.3, Section 5200, Appendix 9200, & Appendix 9400	31. Does the ACP identify the oil spill response equipment used to support the largest WCD scenario amount based on the criteria established in §254.23 and §254.24? If Yes, go to question 32. If No, identify as a contingency plan gap.		
40 CFR § 300; COMDTINST 16471.3, Section 5200, Appendix 9200, & Appendix 9400	32. Does the ACP identify the private sector oil spill response equipment provided by clean-up companies (e.g., Oil Spill Removal Organizations) used to support the largest WCD scenario amount based on the criteria established in §254.23 and §254.25? If Yes, go to question 33. If No, identify as a contingency plan gap.	0	0
40 CFR § 300; COMDTINST 16471.3, Section 3200, Section 3600, Section 4600, Appendix 9200, & Appendix 9400	33. Based on the WCD trajectory analysis, does the ACP address the oil spill recovery and protection strategies used in the response to minimize the impact of the largest WCD scenario amount based on the criteria established in §254.23 and §254.26? If Yes, go to question 34. If No, identify as a contingency plan gap.	0	0
40 CFR § 300; COMDTINST 16471.3, Section 3200, Section 3400, Section 4600, Section 4700; Appendix 9200, & Appendix 9400	34. Does the ACP address dispersant use used in the response to minimize the impact of the largest WCD scenario amount based on the criteria established in §254.23 and §254.27? If Yes, go to question 35. If No, identify as a contingency plan gap.	0	0
40 CFR § 300; COMDTINST 16471.3, Section 3200, Section 3400, Section 4600, Section 4700; Appendix 9200, & Appendix 9400	35. Does the ACP address in situ burning used in the response to minimize the impact of the largest WCD scenario amount based on the criteria established in §254.23 and §254.28? If Yes, go to question 36. If No, identify as a contingency plan gap.	0	0
40 CFR § 300; COMDTINST 16471.3, Section 3200, Section 3400, Section 4600, Section 4700; Appendix 9200, & Appendix 9400	36. Does the ACP address sub-sea containment strategies used in the response to minimize the impact of the largest WCD scenario amount based on the criteria established in §254.23 and §254.26? If Yes, go to question 37. If No, identify as a contingency plan gap.	0	0

Reference	Requirement	Yes	No
Worst Case Discharge Planning Assumptions and Scenarios			
40 CFR § 300; COMDTINST 16471.3, Section 3200, Section 3400, Section 4600, Section 4700; Appendix 9200, & Appendix 9400	37. Does the ACP address waste disposal options used in the response to minimize the impact of the largest WCD scenario amount based on the criteria established in §254.23 and §254.26? If No, identify as a contingency plan gap. Assessment complete. Document all comments in Part 8.		

Part 8 – Comments

<u>Note</u>: Use this part to document comments identified during the entire review process, as necessary. This information will be used to communicate OSRP deficiencies to BSEE and to develop a workplace to update the applicable ACP.

Part	Question #	Comment

Section 4600 – Environmental

A. Overview

This portion of the WCD Job Aid provides an outline, description, and examples that can be used to develop the Environmental Section (Section 4600) of the ACP.

This section should include the identification and prioritization of Environmentally Sensitive Areas, Economically Significant Areas, and historic properties and landmarks. This section also contains instructions for presenting the information in an effective format using both text and graphics (in order to further develop protection and response strategies and the equipment necessary to respond to a WCD as described in Section 3200). The application of Sections 4600 and Section 3200 of the Job Aid will assist in developing a Wildlife & Sensitive Environments Plan, as detailed in the National Contingency Plan (40 CFR 300.210).

The FOSC and Area Committee must understand the importance of compliance with federal environmental laws and statutes, including the Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act, and National Historic Preservation Act (NHPA).

Section 7 of the ESA makes it clear that all Federal agencies should participate in the conservation and recovery of listed threatened and endangered species. In addition, Section 7 of the ESA provides protection for listed species and their critical habitats. As a result, federal agencies have entered into partnerships with federal resource trustee agencies to accomplish the intent of Section 7. The Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the ESA (Enclosure 1) is the guiding document for interagency informal, formal and emergency consultation. This document provides a means for the USCG, EPA, and trustee agencies to collaborate before, during and after a response. It is the responsibility of the Federal agency taking an action (e.g., USCG directing oil spill response efforts) to consider the impacts to listed endangered species and critical habitats.

Essential fish habitat (EFH) is identified for species managed in Fishery Management Plans under the Magnuson-Stevens Fishery Conservation and Management Act. An essential fish habitat is the habitat necessary for managed fish to complete their life cycle so that a fishery that can be harvested sustainably. The Magnuson-Stevens Act requires the National Marine Fisheries Service (NMFS) to work with other Federal agencies to conserve and enhance EFHs. As a result, whenever Federal agencies authorize, fund, or carry out actions (including oil spill response) that may adversely impact an EFH, they must consult with NMFS regarding the impact of their activities on EFH. To streamline the consultation process, NMFS attempts to conduct EFH and ESA Section 7 consultations in conjunction with each other whenever possible. FOSCs and Area Committees are encouraged to use the ESA Section 7 consultation process as the mechanism to conduct similar EFH consultations.

Section 4600

The NHPA was created to preserve historical and archaeological sites across the country. NHPA Section 106 requires federal agencies to evaluate the impact of all federally funded or permitted projects on historic properties (e.g., buildings, archaeological sites, etc.) through a compliance process. In June 1997, the Programmatic Agreement (PA) was created entitled Protection of Historic Properties During Emergency Response Under the National Oil and Hazardous Substances Pollution Contingency Plan. For the purposes of the PA, the FOSC, as the Federal official designated to coordinate and direct response actions, is responsible for ensuring that historic properties are appropriately considered in planning and during emergency response activities. The FOSC should ensure that oil spill protection strategies can be carried out in a manner that eliminates or mitigates impacts on historic properties. Each Area Committee must identify who will be responsible for providing expertise on historic properties matters to the FOSC during emergency response. Depending on the size and complexity of the incident, a State Historical Preservation Officer (SHPO), historic properties specialist, or a historic properties technical advisory group convened by the specialist may be the most effective mechanism.

Environmentally Sensitive Areas are defined as areas that contain natural features which require special protection, including, but not limited to, EFH, critical habitat, or threatened or endangered fish and wildlife species, or areas otherwise protected by federal, state, or local government environmental regulations and statutes. For the purposes of oil spill planning, sites of cultural or historical significance are included in the definition of Environmentally Sensitive Area.

Economically Significant Areas are defined as those areas of explicit economic importance to the public that due to their proximity to potential spill sources may require special protection. Economically Sensitive Areas may include, but are not limited to: high population areas, city centers, potable and industrial water intakes, locks and dams, commercial fisheries, and public and private marinas.

<u>Note</u>: The acronym ESAs can refer to both Environmentally Sensitive Areas and Economically Significant Areas.

The identification and prioritization of ESAs allows for an easier understanding of the potentially impacted areas and the response strategies identified for protecting those areas, particularly when used in conjunction with tools such as multiple-layered GIS maps and NOAA Environmental Sensitive Index (ESI) maps. NOAA has also developed Tidal Inlet Protection Strategies (TIPS) in many COTP Zones that are excellent oil spill planning resources. The identification of these ESAs (along with the response strategies developed as a part of Section 3200) will form the basis of the Geographic Response Plans (GRPs) included as part of the ACP. A GRP is a highly focused plan that uses a large scale to identify ESAs and detail the protection and response strategies that may be employed. A GRP is effective for organizing and displaying information in a functional format for immediate use during both planning and response and for assistance in developing a Common Operating Picture. A digital format facilitates access to and wide distribution of the data.

The actions identified in this Section of the Job Aid are critical in a multi-step process to develop a high quality ACP. This process includes:

- Identifying and prioritizing all environmentally sensitive areas, including EFH, critical habitat, historically or culturally significant areas, or threatened or endangered fish and wildlife species, cultural, and economically significant areas within the local Area.
- Identify and prioritize all economically sensitive areas, including high population areas, city centers, potable and industrial water intakes, locks and dams, commercial fisheries, and public and private marinas.

B. Area Committee Coordination

In developing this section, a significant amount of coordination with stakeholders (such as natural resource trustees, State OSC, State Emergency Managers and environmental agencies, local agencies, and other interested Area Committee members) is critical for success.

It is anticipated that Planners will conduct a series of organized, facilitated consensus-decision making workshops or meetings to identify and prioritize ESAs within the local Area. It is recommended that these discussions be facilitated by the NOAA SSC or their designated representative that have requisite knowledge of this planning process and has experience interacting with natural resource trustees from state/local jurisdictions. These discussions will allow participants to communicate their individual agency or organizations' priorities of environmental and economic significance.

It is paramount that the Area Committee strictly follows follow the steps outlined in **Enclosure 1** in determining the appropriate scope and extent of consultation needed based on the impacts of oil spill response activities on endangered species and critical habitat.

Note: Pre-spill planning is an important first step in the Endangered Species Act, Section 7 consultative process found in **Enclosure 1**. Identification of ESAs and development of protection priorities is necessary to inform the prespill consultation process. It is mandatory that ESA Section 7 pre-spill consultation, either informal or formal, is documented by the Area Committee, signed by the FOSC and key natural resource trustees (e.g., DOI, USFW, NOAA, etc.), and the document is included in the respective ACP.

<u>Note</u>: Once the identification and prioritization of ESAs has been completed, the development of recovery and protection strategies should be completed. See Section 3200.

C. Elements

The key elements of Section 4600 are:

- Identification and Prioritization of ESAs
- Development of the environmental portion of GRPs using the ESAs.

4610 Identify and Prioritize Environmentally Sensitive and Economically Significant Areas

Introduction

Below are the actions to be taken to identify and prioritize all environmentally sensitive and economically significant areas within the local Area.

STEP	ACTION	✓
1.	The Sector Planning staff (i.e., the individual who coordinates Area Committee meetings) should serve as the meeting coordinator for a gathering of key stakeholders with responsibility and/or jurisdiction for identifying ESAs within the local Area.	
2.	The USCG meeting coordinator should contact the NOAA SSC or their designated representative to invite him or her to facilitate this meeting of stakeholders.	
3.	The USCG meeting coordinator and the NOAA SSC should work together to gather pertinent data that will help with the identification and prioritization of ESAs. Examples include: ESI maps, nautical charts, port authority maps, municipal zoning maps, etc. Local OSROs and other first responders can also assist with gathering data and resources to assist this process, including spill history data.	
4.	Identify and document prospective stakeholders that have special interest in, or knowledge of, these ESAs to participate in this meeting such as EPA OSCs, State and Local resource managers, SHPO representatives, Federal natural resource trustees, land managers, tribal representatives, representatives of state and local governments and emergency management community, industry and non-governmental organizations (NGOs).	
	Note: The NOAA SSC and State OSC may be useful resources in determining stakeholders who should participant in this meeting.	
5.	Provide information to prospective stakeholder participants regarding the purpose of the meeting, desired outcomes, and expectations for their participation. It is recommended that pertinent information (e.g., existing ESI maps) be sent to these individuals in advance of the meeting. The meeting coordinator should clearly communicate to the invited participants that they should come prepared to discuss those areas that they are responsible for and that should be considered for priority protection.	
6.	Conduct an organized, facilitated consensus-decision making workshop or series of meetings with individuals that have special interest in or knowledge of these ESAs. At a minimum, the following critical, special, significant, or otherwise designated protected or other Environmentally Sensitive Areas should be addressed during the meeting: • Endangered Species • Essential Fish Habitat • Critical habitat (as defined by ESA Section 7) • Marine Sanctuaries • Wildlife Refuges • Other threatened fish & wildlife species (classified by State or local	

resource trustees)

- Designated Federal or State historical, cultural or archeological sites
- Other historical or cultural landmarks of significance
- Tribal lands
- Areas otherwise protected by federal, state, or local government environmental regulations and statutes
- Sensitive shorelines
- Bird nesting areas
- Inlets
- Coves

At minimum, the following Economically Significant Areas should be addressed during the meeting:

- High tourism areas (e.g., beaches, waterfront areas, etc.)
- Water intakes for municipal water treatment plants
- Water intakes for industrial facilities (including critical infrastructure such as nuclear power plants)
- Marinas
- Significant port or industrial facilities
- Other areas of economic concern to the local area

<u>Note</u>: Make sure to account for seasonal or historical use considerations when describing these areas.

<u>Note</u>: Make sure to document the agencies that are responsible for all ESAs within the local Area and the participation at the meetings/workshops.

- 7. The agenda for this meeting should include the following topics:
 - <u>Welcome by FOSC</u>: Participation by the OSC is critical to showing the importance that the Coast Guard and the command places on this process.
 - Explanation of Purpose and Process: The meeting coordinator or the meeting facilitator should explain the purpose of the meeting and how it fits into the development of the ACP.
 - <u>Introductions:</u> Each participant should be invited to introduce themselves and to comment on their areas of concern and responsibility.
 - <u>Identification of Environmentally Sensitive Areas</u>: Participants should be invited to identify those Environmentally Sensitive Areas that represent areas of concern for individual participants as well as any known seasonal or other variations in criticality and known critical thresholds of environmental concern.
 - <u>Identification of Economically Significant Areas</u>: Participants should be invited to identify those Economically Significant Areas that represent areas of concern for individual participants as well as any known seasonal or other variations in criticality and known critical thresholds of economic concern.
 - <u>Prioritization of Environmentally Sensitive Areas</u>: Participants should attempt to reach consensus on the prioritization of Environmentally Sensitive Areas (see Step 9 following).

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- <u>Prioritization of Economically Significant Areas</u>: Participants should attempt to reach consensus on the prioritization of Economically Significant Areas (see Step 9 following).
- <u>Discussion of ESA Section 7 Consultation process.</u> The information gathered on endangered species and critical habitat during this process should be used to initiate the consultation process with the Federal resource trustee agencies.
- Review of Results of the Meeting
- Review Next Steps in the Process of Developing the ACP.

<u>Note</u>: It is highly likely that the identification and prioritization of these areas will require more than one session.

- 8. Document the process and results of this/these meeting(s).
- As noted, one of the expected outcomes of the meeting is the identification and prioritization of ESAs reached by consensus. NOAA's ESI toolkit (http://response.restoration.noaa.gov/) ranks areas from least sensitive to damage from spilled oil (lowest numbers) to most sensitive (highest numbers). This may be useful in assisting with the prioritization of ESAs.

(Note: The below prioritization of sensitive areas is used as an example, and may not represent the priorities for your particular Area Committee.)

High, Priority 1 – Extremely Sensitive – Highest concern for protection. For example:

- Habitats for rare, threatened or endangered species (State or Federal);
- Wetlands, estuaries and lagoons with emergent vegetation (marsh-riparian ESI type 10);
- Sheltered tidal flats (ESI type 9);
- Sites of significant concentrations of vulnerable and sensitive species (e.g., Pinniped pupping);
- Other areas determined to be extremely sensitive by the stakeholders.

Medium, Priority 2 – Very Sensitive – Very high concern for protection

- Major pinniped haulout areas during non-pupping seasons;
- Moderate concentrations of vulnerable and sensitive species;
- Other low energy habitats (ESI types 8A, 8B, 7 and 6B).

Low, Priority 3 – Sensitive. Great concern for protection, including higher energy habitats (ESI 6A through 1). For example:

• Habitats important to large numbers of sport species, commercial value, and scientific interest or species experiencing significant population declines though not yet threatened.

Priority 4 – Sensitive, but not of immediate concern for protection.

Note: Some areas may have different priorities based on seasonality.

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The information gathered on endangered species and critical habitat 10. described in Section 4600 should be used to initiate the consultation process with the Federal resource trustee agencies. Enclosure 1 contains very specific guidelines and process for the pre-spill consultation processes to evaluate potential effects on Endangered Species in the local area. It is most important for the Area Committee follow the steps outlined in the MOA in determining the appropriate scope and extent of consultation needed based on the impacts of oil spill response activities on endangered species and critical habitat. The ultimate goal of ESA Section 7 consultation is to ensure that oil spill response activities have minimal effects on listed species. Key components and considerations during ESA consultation include: Request (in writing) from USFWS information on endangered species in the local Area, including a list of those species and a description of their habitats). Upon receipt, distribute updated species information to all holders of the ACP. Providing a website link (vice sending many files and/or documents) is recommended for this step. Protection strategies developed using guidance in Section 3200 should be used to determine the potential for oil spill response activities to adversely affect listed species and critical habitat. **IMPORTANT:** If the USCG, EPA, & trustee agencies cannot determine that adverse effects will not occur during a response action, the USCG or EPA, as appropriate, must initiate and complete the formal consultation process described in **Enclosure 1**.

Either informal or formal ESA consultation must be documented in writing and signatures obtained from the appropriate Federal, State and local resource trustees (e.g., NOAA, DOI, USFWS, etc.). This

4620 Develop a Geographic Response Plan(s)

Introduction Below are the actions to be taken to develop priority protection areas.

signed document must be included in the ACP.

STEP	ACTION	✓
1.	 Display the prioritized protection areas (identified in Section 4610) overlaid on a digital/PDF version of an ESI map or equivalent that contains (at a minimum) the following information: Identification of the environmentally sensitive and economically significant areas, by priority, clearly labeled and represented clearly by icons Endangered Species Essential Fish Habitat ESI types Seasonal variation concerns Cultural, Historical, & Archaeological sites or areas of significance Detailed key describing map symbology 	

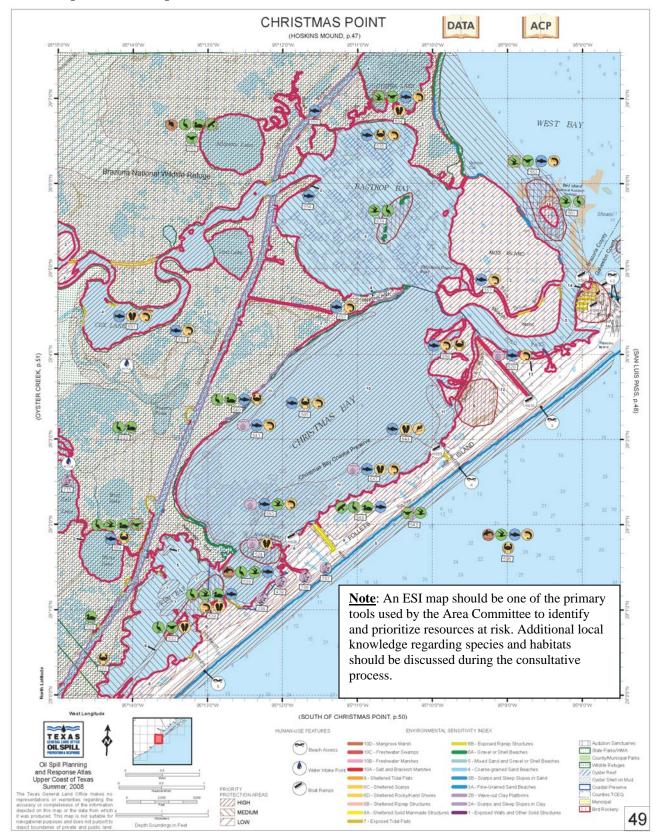
	Note: Section D, Examples contains an example of a Priority Protection Areas Map and Narrative Description.	
2	Utilize the information contained here to support the Risk Assessment process in Section 9400.	

D. Examples Below are examples of the different elements of Section 4600:

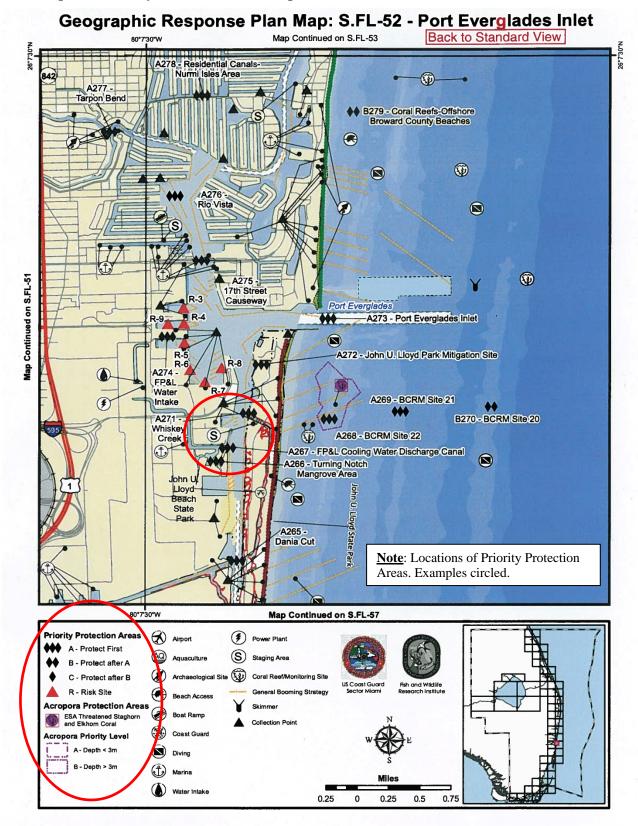
Section 4620 Examples

- ESI Map
- Priority Protection Areas Map and Narrative Description

4620 Example #1: ESI Map



4620 Example #2: Priority Protection Areas Map



OIL SPILL SENSITIVE AREA REPORT- SECTOR: Mi	ami
SITE NAME: John U. Lloyd Park Mitigation Site LATITUDE (DMS): 26° 5' 17.999" N LATITUDE (DD): 26.0883329924 PRIORITY (SEASON): SPR A SUM A AUT A GEN LOCATION:	SITE ID: A272 LONGITUDE (DMS): 80° 6' 42.001" W LONGITUDE (DD): -80.1116669939 WIN A
Map Inform Map Inform GRP MAP: S.FL-52 TOPO NAME: POMPANO BEACH, FLA.	(1983) OTHER MAP: FL (1983) OPERATIONAL AREA: EACH TO HALLADALE FLORIDA QQ-RR Expertise - Phone ER: th State Recreation Area - (954) 923-2833\Sidney J.
Resources a SHORELINE TYPES: WILDLIFE RESOURCES TO BE PROTECTED: Manatees, Sea turtles, Shore birds, Wading birds, Osprey, Feeding all seas HABITAT TO BE PROTECTED: 1 and 1/4 miles of mangroves intracoastal side -Tidal Swamp- Maritime Hammock	Note: This section should explain the graphical
THREATENED SPECIES: Manatees - Sea Turtles and Bald eagle	
Response Cons	iderations
STAGING AREAS: Parking lots, beach and boat ramp inside park located at 65	
COLLECTION POINTS: 8 collection points along beach; 4 on north end, 4 on s	outh end, 4 on south end
AREA ACCESS: boat\helicopter\vehicle PHYSICAL DESCRI POTENTIAL SPILL SOURCES: TIDAL RANGE: FT. MAX	PTION: CCURRENT: KTS.
Protection St	
MIN BOOM LENGTH: 1200 FT. BOOMING METHOD: PROTECTION STRATEGY (below): DEGREE OF PROTECT. Boom off west shoreline south of USCG base to south entrance to Whiskey	Protect ABILITY:
OTHER RESPONSE RESOURCES : 7 personnel available OTHER RESOURCES AVAILABLE:	
NEAREST AVAILABLE RESOURCES: PERSONNEL AVAILABLE: POINT OF CONTACT/AGENCY:	
POINT OF CONTACT/AGENCY:	PH. #PH. #
BOOM: TYPE: LENGTH: SKIMM	MER: TYPE: NUMBER:
TYPE: LENGTH: Site report produced by Florida FWC - Fish and Wildlife Research Institute	TYPE: NUMBER:

Section 4600 12

For additional information, please contact the FWC - FWRI - Center for Spatial Analysis (727) 896-8626

Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act

I. INTRODUCTION

- A. Parties. The Parties to this agreement are the U.S. Coast Guard (USCG), the U.S. Environmental Protection Agency (USEPA), the Department of the Interior (DOI) Office of Environmental Policy and Compliance, the U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NMFS) and National Ocean Service (NOS).
- B. The Parties have conducted a review of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and associated oil spill response activities to coordinate their actions under Section 1321(d) of the Clean Water Act and Section 7(a)(1) of the Endangered Species Act, as amended (16 U.S.C. 1531 et seq.) (ESA). Section 1321(d) of the Clean Water Act establishes the NCP and assigns responsibilities to Federal agencies in mitigating damage from oil and hazardous materials spills, including the conservation of fish and wildlife. Section 7(a)(1) of the ESA requires all Federal agencies, in consultation with and with the assistance of the Secretaries of the Interior or Commerce, as appropriate, to review their programs and utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of listed species. As a result of this review, recommended procedures have been developed that will achieve better conservation of listed species and critical habitat during implementation of oil spill response activities.
- C. This agreement provides a general framework for cooperation and participation among the Parties in the exercise of their oil spill planning and response responsibilities. Following the recommended procedures presented in this agreement will better provide for the conservation of listed species, improve the oil spill planning and response procedures delineated in the NCP, and ultimately streamline the process required by Section 7(a)(2) of the ESA.

II. PURPOSE

A. This agreement is intended to be used at the area committee level primarily to identify and incorporate plans and procedures to protect listed species and designated critical habitat during spill planning and response activities. Proactive regional planning may also take into consideration concerns for proposed and candidate species, as well as listed species' habitat not yet designated as critical.¹

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¹ Adverse effects on non-designated critical habitat used by listed species has a potential for having an adverse affect on these listed species. Therefore, planners should consider these areas if information is available.

- B. This agreement coordinates the consultation requirements specified in the ESA regulations, 50 CFR 402, with the pollution response responsibilities outlined in the NCP, 40 CFR 300. It addresses three areas of oil spill response activities: pre-spill planning activities, spill response event activities, and post-spill activities. The agreement identifies the roles and responsibilities of each agency under each activity. By working proactively before a spill to identify potential effects of oil spill response activities on listed species and critical habitat, and jointly developing response plans and countermeasures (response strategies) to minimize or avoid adverse effects, impacts to listed species and critical habitat should be reduced or avoided completely. Should a spill occur, response plans and countermeasures will be used to implement response actions to minimize damage from oil discharges in a manner that reduces or eliminates impacts to listed species and critical habitat. In the event that oil spill response actions may result in effects on listed species or critical habitat, the agreement provides guidance on how to conduct emergency consultation under the ESA. It also describes the steps for completing formal consultation, if necessary, after the case is closed, if listed species or critical habitat have been adversely affected.
- C. The goal of this agreement is to engage in informal consultation wherever possible during planning and response. With adequate planning and ongoing, active involvement by all participants, impacts to listed species and critical habitat and the resulting need to conduct subsequent ESA Section 7(a)(2) consultations will be minimized or obviated.

III. LEGAL AUTHORITIES

- A. The Federal Water Pollution Control Act (FWPCA), 33 U.S.C. § 1321., requires that when a spill occurs, the President take such action as necessary to ensure effective and immediate removal of a discharge, and mitigation or prevention of a substantial risk of a discharge of oil into the waters of the United States. The National Contingency Plan (NCP), 40 CFR Part 300, prepared in accordance with the FWPCA, assigns duties to Federal agencies to protect the public health and welfare, including fish, wildlife, natural resources and the public. The NCP designates the Federal On Scene Coordinator (FOSC) as the person responsible for coordinating an oil spill response. (The abbreviation OSC is used in the NCP, while the abbreviation for Federal On Scene Coordinator is FOSC in this agreement.) Nothing in this agreement limits the authority of the Federal On Scene Coordinator as defined in the NCP.
- B. The Endangered Species Act of 1973 (ESA), as amended, 16 U.S.C. §1531 <u>et seq.</u>, provides a means to protect threatened and endangered species and the ecosystems upon which they depend. The ESA requires that Federal agencies insure that the actions they authorize, fund, or carry out do not jeopardize listed species or adversely modify their designated critical habitat. Regulations for conducting Section 7 consultation are set forth in 50 CFR Part 402.

IV. **DEFINITIONS**

The following definitions apply to this agreement and are taken from the definitions contained in either the NCP or the March 1998 USFWS & NMFS Endangered Species Consultation Handbook. For definitions of terms not listed below, refer to the USFWS & NMFS Endangered Species Consultation Handbook and the NCP as appropriate.

Area Committee - the entity appointed by the President consisting of members from qualified personnel of Federal, state, and local agencies with responsibilities that include preparing an area contingency plan for an area designated by the President. The chairs of the Area Committee are the USCG for coastal and Great Lakes plans, and the USEPA for inland plans. In some instances the Regional Response Team (RRT) may act as the Area Committee. In this MOA, the term Area Committee also includes the RRT acting as the Area Committee.

Area Contingency Plan (ACP) - the plan prepared by an Area Committee (or the RRT acting as the Area Committee) that is developed to be implemented in conjunction with the NCP and Regional Contingency Plan (RCP), in part to address removal of a worst case discharge and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility operating in or near an area designated by the President. A detailed annex containing a Fish and Wildlife and Sensitive Environments Plan prepared in consultation with the USFWS, NOAA, and other interested natural resource management agencies should be incorporated into each ACP. In this MOA, the term ACP also includes sub-area ACP's, sub-area contingency plans, geographic response plans and geographic response strategies as per 40 CFR 300.210.

Biological Assessment - information prepared by or under the direction of the Federal action agency (USCG or USEPA) regarding: 1) listed and proposed species and designated critical habitat that may be affected by proposed actions; and, (2) the evaluation of potential effects of the proposed actions on such species and habitat.

Biological Opinion - document which includes: (1) the opinion of the USFWS or NMFS as to whether or not a Federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat. This document will also contain an incidental take statement, that, if appropriate, exempts the Federal actions from the ESA Section 9 take prohibitions.

Candidate species – plant and animal taxa considered for possible addition to the List of Threatened and Endangered Species.

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Case is Closed – When removal operations are complete in accordance with 40 CFR 300.320(b).

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Critical habitat - areas designated by the USFWS and NMFS pursuant to Section 4 of the ESA for the purposes of identifying areas essential for the conservation of a threatened or endangered species and which may require special management considerations.

Emergency Consultation – an expedited consultation process that takes place during an emergency (natural disaster or other calamity) (50 CFR 402.05). The Services have determined that oil spill response activities qualify as an emergency action. The consultation may be initiated informally. The emergency continues to exist until the removal operations are completed and the case is closed in accordance with 40 CFR 300.320(b). The FOSC will continue to conduct emergency consultations, if needed, until the emergency is over and the case is closed. Formal, or informal, consultation is initiated after the emergency actions, the justification for the expedited consultation, and any impacts to listed species and their habitats.

Federal On Scene Coordinator (FOSC) - the Federal official predesignated by USEPA or the USCG to coordinate and direct responses under the FWPCA as defined in the NCP.

Formal Consultation² - a process between USFWS or NMFS and the Federal action agency (USCG or USEPA) that: (1) determines whether a proposed Federal action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with a Federal agency's written request and submission of a complete Section 7 consultation initiation package; and (3) concludes with the issuance of a biological opinion and incidental take statement, as appropriate, by either of the Services. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat. See informal consultation).

Incidental Take - take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a Federal agency or applicant.

Informal Consultation - an optional process that includes all discussions and correspondence between the USFWS or NMFS and the Federal agency (USCG or USEPA) or designated non-Federal representative, prior to formal consultation, to determine whether a proposed Federal action may affect listed species or critical habitat. This process allows the Federal agency to utilize the Services' expertise to evaluate the agency's assessment of potential effects or to suggest possible modifications to the proposed action, which could avoid potential adverse effects. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat).

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² Formal consultation can occur during planning or after the conclusion of emergency consultation if listed species or critical habitat have been affected.

Listed Species – for the purposes of this MOA, any species of fish, wildlife or plant, which has been determined to be endangered or threatened under Section 4 of the ESA.

National Contingency Plan (NCP) – National Oil and Hazardous Substances Pollution Contingency Plan. The NCP is a national plan that provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants and contaminants. The NCP is set forth in 40 CFR 300.

National Response Team (NRT) - a national team, defined under the NCP, responsible for national planning, policy, and coordination for hazardous substance and oil spill preparedness and response, consisting of representatives from agencies named in 40 CFR 300.175(b).

Regional Response Team (RRT) - a regional team of agency representatives that acts in two modes: the standing RRT and incident specific RRT. The Co-chairs are the USCG and USEPA. The standing team is comprised of designated representatives from each participating Federal agency, state governments and local governments (as agreed upon by the states). Incident-specific teams are formed from the standing team when activated for a response. The role of the standing RRT includes establishing regional communications and procedures, planning, coordination, training, evaluation, preparedness and related matters on a region-wide basis. It also includes assisting Area Committees in coordinating these functions in areas within their specific regions. The role and composition of the incident-specific team is determined by the operational requirements of the response. During an incident, it is chaired by the agency providing the FOSC.

Services – Term used to refer to both the USFWS and NMFS.

V. PROCEDURES

Oil spill planning and response procedures are set forth in the NCP. This agreement is intended to facilitate compliance with the ESA without degrading the quality of the response conducted by the FOSC, to improve the oil spill planning and response process, and ensure continued inter-agency cooperation to protect, where possible, listed species and critical habitat.

A. <u>PRE-SPILL PLANNING</u>

(1) While drafting Area Contingency Plans themselves may not result in effects to listed species, actions implemented under the plans may. It is essential that the Area Committee engage USFWS and NMFS during the ACP planning process while developing or modifying the ACP and response strategies. This informal consultation can be used to determine the presence of listed species or critical habitat, and the effects of countermeasures, and to ensure that measures to reduce or avoid impacts to listed species and critical habitats during oil spill response activities are developed. By consulting on the anticipated effects prior to implementing response actions, decisions can be made rapidly during the spill, harm from response actions can be

- minimized, and implementation of response strategies specifically designed to protect listed species and critical habitat can be achieved.
- (2) The pre-spill planning process is shown as a flow chart in Appendix A. The Area Committee Chair will request, in writing, that endangered species expertise and a species list be provided by the Services. The request should also describe the area and include a general description of the countermeasures being considered and the planning process to be used (e.g., a workgroup). In order to document the request for consultation and planning involvement, the request shall be sent to both NOAA and USFWS. To obtain NMFS assistance, a request should be sent to the Department of Commerce (DOC) RRT representative, with a copy to the NOAA Scientific Support Coordinator (SSC) and the NMFS Regional Field Office. For USFWS support, a request should be sent to the local USFWS field office(s), with a copy to the USFWS Regional Response Coordinator (RRC) at the appropriate USFWS Regional Office(s) and the DOI RRT representative. It is the responsibility of the USFWS RRC, acting through the Ecological Services Assistant Regional Director, and the NOAA SSC to act as a liaison between the respective Service and the Area Committee. USFWS and NMFS will orally respond to the request within 30 days of receipt and provide a written response within 60 days. The response should include designation of a listed species expert to assist the Area Committee.
- (3) If listed species or critical habitat are present in the planning area being considered the Area Committee should use a planning process that ensures engagement of Service experts. This process shall ensure that the appropriate participants jointly gather and analyze the information needed to complete the Planning Template in Appendix C. This planning process constitutes informal consultation. The goals of this planning process are to identify the potential for oil spill response activities to adversely affect listed species and critical habitat and to identify for inclusion in the ACP information on sensitive areas, emergency response notification contacts, and any other information needed. Methods should be developed to minimize identified adverse effects and, where necessary, the plan should be modified accordingly. If specific sources of potential adverse effects are identified and removed, the Services will provide a concurrence letter and Section 7(a)(2) requirements will be deemed to have been met.
- (4) If, after the process in Appendix C has been followed, it cannot be determined that adverse effects will not occur during a response action, the USCG or USEPA, as appropriate, will initiate formal consultation using the information gathered in Appendix C; this information will be used by the Services to complete formal

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³ 40 CFR 300.170(a).

⁴ Process options include using an informal workgroup; formal workgroup, Environmental Risk Assessment process, or other process based on Area Committee needs.

⁵ This process does not negate any regional consultations that have already occurred, nor alter the strategies/procedures in the ACP until the ACP is officially modified in consultation with USFWS or NMFS.

⁶ Letter is required for the administrative record. See Appendix E.

consultation. This will be a programmatic consultation that generally addresses oil spill response activities at issue in the plan area. At times when specific information is available about certain oil spill response methods and listed species and critical habitat, it may be possible to pre-approve particular activities that may be implemented in the event there is insufficient time to initiate emergency consultation before the need to take action. 8

(5) All parties recognize that development and modification of the ACP is an ongoing process. Changes, including modifications to response actions or changes to the species list, should be addressed regularly through a dynamic planning process. The Services should contact the Area Committee or workgroup if they become aware of newly listed species that may be affected by planned response activities. The Area Committee should likewise notify the Services of changes to planned response activities. The Area Committee or workgroup should evaluate any changes and assess the need for additional consultation as needed

B. OIL SPILL RESPONSE

During an oil spill event which may affect listed species and/or critical habitat, emergency consultations under the ESA are implemented (50 CFR 402.05) for oil spill response actions. Emergency consultation may be conducted informally through the procedures that follow (See Appendix A). Emergency consultation procedures allow the FOSC to incorporate listed species concerns into response actions during an emergency. "Response" is defined in this agreement as the actions taken by the FOSC in accordance with the NCP. The FOSC conducts response operations in accordance with the NCP and agreement established in the ACP.

(1) As per the NCP and ACP, the FOSC will notify the RRT representatives of DOI and DOC through the established notification process regardless of whether listed species or critical habitat is present. Upon notification, the DOC and DOI representatives shall contact the NOAA SSC and RRC, respectively, and other appropriate Service contacts as provided in internal DOC or DOI plans, guidance, or other documents. If established in the ACP, the FOSC may also contact the Service regional or field offices directly (see Section V(A)(3) above). If listed species and/or critical habitat are present or could be present, the FOSC shall initiate emergency consultation by contacting the Services. The NOAA SSC and RRC shall coordinate appropriate listed species expertise. This may require timely on-scene expertise from the Services' local field offices. These Service representatives may, as appropriate, be asked by the FOSC to participate within the FOSC's Incident Command System and provide information to the FOSC. 10

⁷ Letter is required for the administrative record. See Appendix E.

⁸ Due to time constraints associated with spill response, this does not mean that immediate spill response actions cannot occur to meet the requirements of 40 CFR 300.317. However, planning should address specific procedures for initiating emergency consultation for activities that are pre-approved and for those that have not been pre-approved.

⁹ Based on pre-spill planning or discovered during the response.

¹⁰ 40 CFR 300.175(b)(7) & (b)(9); 40 CFR 300.305(e).

(2) The ACP, including any agreed upon references cited in the ACP, should form the basis for immediate information on response actions. As part of emergency consultation, the Services shall provide the FOSC with any timely recommendations to avoid and/or minimize impacts to listed species and critical habitat. The NOAA SSC should also be involved in these communications as appropriate. If incidental take is anticipated, and if no means of reducing or avoiding this take are apparent, the FOSC should also be advised and the incidental take documented. If available, the FOSC should consider this information in conjunction with the national response priorities established in the NCP. The FOSC makes the final determination of appropriate actions.

- (3) It is the responsibility of both the FOSC and the Services' listed species representatives to maintain a record of written and oral communications during the oil spill response. The checklist contained in Appendix B is information required to initiate a formal consultation in those instances where listed species and/or critical habitat have been adversely affected by response actions. If it is anticipated that listed species and/or critical habitat may be affected, the FOSC may request that the USFWS and/or NMFS representative to the Incident Command System oversee and be responsible for the gathering of the required information in Appendix B while the response is still ongoing. The FOSC may also choose to designate another individual to be responsible for collecting the information. Although in some instances the drafting of information for Appendix B may be completed after field removal operations have ceased, it is anticipated that collection of the information should be complete before the case is officially closed and that no further studies will be necessary.
- (4) It is the responsibility of the FOSC to notify the Services' representatives in the Incident Command System of changes in response operations due to weather, extended operations, or some other circumstance. It is the responsibility of the Services to notify the FOSC of seasonal variances (e.g., bird migration), or other natural occurrences affecting the resource. If there is no Service representative in the Incident Command System, the FOSC will ensure that the NOAA SSC and/or DOI representative to the RRT remains apprised of the situation. The Services will continue to offer recommendations, taking into account any changes, to avoid jeopardizing the continued existence of listed species or adversely modifying critical habitat, and to minimize the take of listed species associated with spill response activities.

¹³ See Section 8.2(B) of the USFWS & NMFS Endangered Species Consultation Handbook.

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¹¹ See Section 8.1 of the USFWS & NMFS Endangered Species Consultation Handbook (http://endangered.fws.gov/consultations/s7hndbk/s7hndbk.htm).

¹² 40 CFR 300.317 National Response Priorities.

¹⁴ If requested by the FOSC, the NOAA Scientific Support Coordinator (SSC) may coordinate this data collection.

¹⁵ See Appendix D for example Pollution Removal Funding Authorization (PRFA) Statement of Work language.

C. POST RESPONSE

If listed species or critical habitat have been adversely affected by oil spill response activities, a formal consultation is required, as appropriate. ¹⁶ Informal emergency consultation shall remain active until the case is closed. The FOSC will initiate consultation on the effect of oil spill response activities (not the spill itself) after the case is closed. Every effort shall be made to ensure that relevant information generated as part of the consultation process is made available for use in the Natural Resource Damage Assessment (NRDA) process. (Note: NRDA activities are separate from this consultation.)

- (1) After the FOSC determines that removal operations are complete in accordance with 40 CFR 300.320(b), the impacts of the response activities on listed species and critical habitat will be jointly evaluated by the FOSC and the Services.
- (2) If listed species or critical habitat were adversely affected by oil spill response activities, the FOSC will follow the procedural requirements of 50 CFR 402.05(b) (see Appendix A). The document developed by following Appendix B, information required to initiate a formal consultation following an emergency, should be included with a cover letter to the Services requesting consultation and signed by the FOSC. The FOSC will work with the Services and the NOAA SSC, as appropriate, to ensure that Appendix B is complete.¹⁷ This document comprises the FOSC's formal request for consultation.
- (3) The Services normally issue a biological opinion within 135 days of receipt of the Section 7 consultation request (50 CFR 402.14). When a longer period is necessary, and all agencies agree, the consultation period may be extended. The final biological opinion will be prepared by the Services and provided to the FOSC, USFWS RRC, NOAA SSC, DOI and DOC RRT members, and the Area Committee Chair so that recommendations can be reviewed by the Area Committee, and where appropriate, implemented to minimize and/or avoid effects to listed species and critical habitat from future oil spill response actions. The result of the consultation should be considered by the FOSC for inclusion in a lessons learned system so changes can be made to the ACP, as necessary, for the benefit of future oil spill response actions. If such changes to the ACP modify the anticipated effects to listed species or critical habitat, the Services should appropriately document the anticipated changes in future effects and complete any appropriate administrative steps.

¹⁶ If only proposed species or proposed critical habitat have been adversely affected, a formal consultation is not required; however, ESA conference procedures should be followed as appropriate. See the USFWS & NMFS Endangered Species Consultation Handbook for conference information.

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¹⁷ The NOAA SSC may also assist.

¹⁸ Recommendations may also be provided for addressing effects caused by spill response actions. This information should be provided to the NRDA process as appropriate.

VI. Points of Contact. The following are the points of contact for each Party:

USCG: Chief, Office of Response, Coast Guard Headquarters (G-MOR), (202) 267-0516.

USEPA: Oil Program Center, U.S. Environmental Protection Agency, (703) 603-8823.

NOAA - NMFS: Section 7 Coordinator, Endangered Species Division, Office of Protected Resources, (301) 713-1401.

USFWS: National Spill Response Coordinator, U.S. Fish and Wildlife Service, Division of Environmental Quality, (703) 358-2148.

NOAA - NOS: Director, Office of Response and Restoration, (301) 713-2989 x101.

DOI: Office of Environmental Policy and Compliance, (202) 208-6304.

VII. Funding and Resources. This agreement is not a fiscal or funds obligation document. Nothing in this agreement shall be construed as obligating any of the Parties to the expenditure of funds in excess of appropriations authorized by law or otherwise commit any of the Parties to actions for which it lacks statutory authority. It is understood that the level of resources to be expended under this agreement will be consistent with the level of resources available to the Parties to support such efforts. Any activities involving reimbursement or contribution of funds between the Parties to this agreement will be handled in accordance with applicable laws, regulations and procedures. Such activities will be documented in separate agreements with specific projects between the Parties spelled out. The separate agreements will reference this general agreement.

VIII. Effective Date. The terms of this agreement are effective upon signature by all Parties.

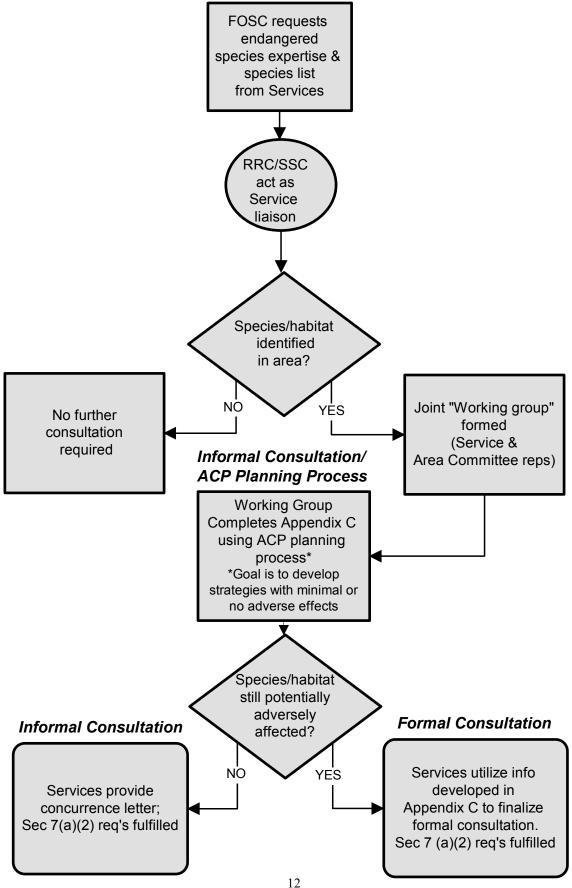
IX. Modification. This agreement may be modified upon the mutual written consent of the Parties.

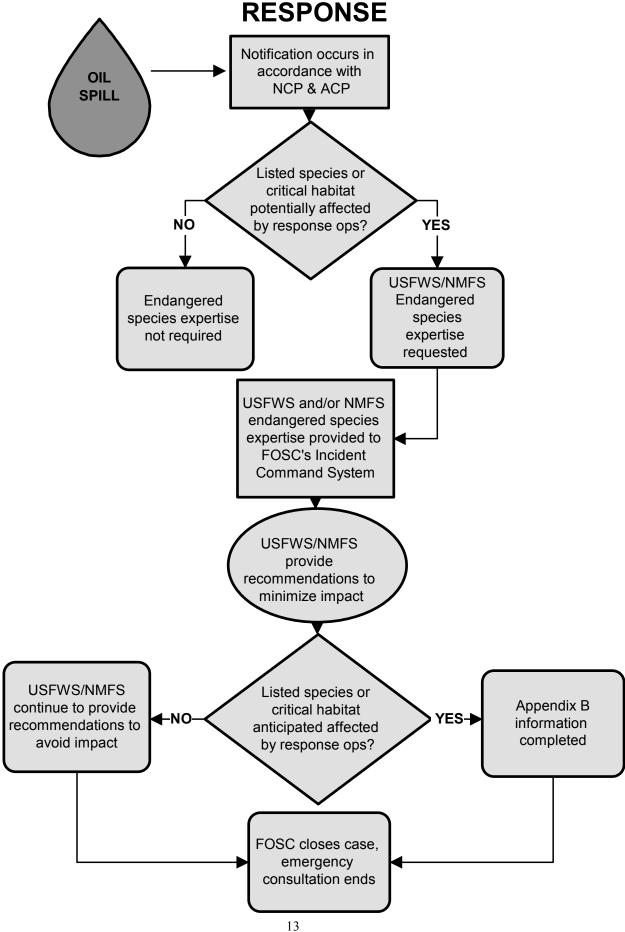
X. Termination. The terms of this agreement, as modified, with the consent of all Parties, will remain in effect until terminated. Any Party upon 60 days written notice to the other Parties may terminate their involvement in this agreement.

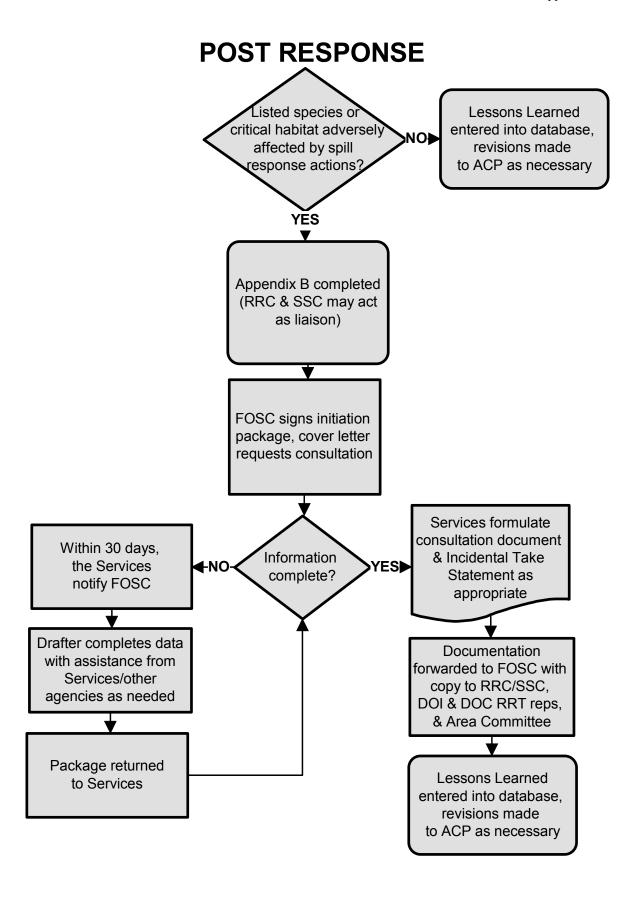
Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act

Approved By:	<u>Date</u> :
Assistant Commandant for Marine Safety and Environmental Protection U.S. Coast Guard	5/25/01
Acting Assistant Administrator Office of Solid Waste and Emergency Response U.S. Environmental Protection Agency	7/22/01
Marting Director U.S. Fish and Wildlife Service	8 June 2001
Assistant Administrator for Fisheries National Marine Fisheries Service National Oceanic and Atmospheric Administration	5/15/01
Assistant Administrator National Ocean Service National Oceanic and Atmospheric Administration	<u>5/30/01</u>
Director Office of Environmental Policy and Compliance	4/12/01

PRE-SPILL PLANNING







APPENDIX B

EMERGENCY CONSULTATION INFORMATION CHECKLIST IN ANTICIPATION OF FOLLOW-UP FORMAL CONSULTATION (50 CFR 402.05)

As soon as practicable after the emergency is under control, which occurs when the case is closed, the FOSC initiates consultation (either formal or informal, as appropriate) with the Services if listed species and/or critical habitat have been affected. The FOSC should ensure that the following checklist is completed before the case is closed. After the case is closed, this information along with a cover letter requesting consultation will be sent to the Services.

- 1. Provide a description of the emergency (the oil spill response).
- 2. Provide an evaluation of the emergency response actions and their impacts on listed species and their habitats, including documentation of how the Services' recommendations were implemented, and the results of implementation in minimizing take.
- 3. Provide a comparison of the emergency response actions as described in #2 above with the pre-planned countermeasures and information in the ACP.

APPENDIX C

PLANNING TEMPLATE

One of the goals of the Area Contingency Plan (ACP) planning process is to develop strategies or actions that reduce the potential for planned oil spill response activities to adversely affect listed species and designated critical habitat. The planning process may also develop strategies that purposefully protect these resources. The following template is recommended for use by a working group of both Service and Area Committee representatives to develop a document that 1) is used to complete consultation pursuant to Section 7 (a)(2) of the Endangered Species Act of 1973, as amended, and 2) produces information to be included in the appropriate sections of the ACP. To streamline the consultation process, the various sections of this document could be drafted during the planning process and used to develop or modify the ACP. This development process will assist all parties in gaining a thorough understanding of the actions under review and provide opportunities for any Section 7 consultation related issues to be raised and addressed in the planning process, rather than during the oil spill response action.

This template is intended to guide the thought process of creating consultation documents and incorporates content requirements set forth in 50 CFR 402.12 as well as information pertinent to the National Contingency Plan requirements under the Fish and Wildlife Annex; not every item will be applicable to every situation.²⁰

Introduction

This section generally should be completed in one, or possibly two paragraphs.

• General overview of the response strategy including: (1) a <u>brief</u> description - one to two sentences; (2) background, history, etc. as appropriate; (3) purpose of the response strategy; (4) identification of the species and designated critical habitat that may be affected (for consultations that will address large numbers of species, it may be desirable to present this list in the form of a table either attached or presented in another section. Also, if species that may potentially occur in the area are not included in this document, explain why).

This should be developed jointly by the action agency and the Services.

Description of the Proposed Response Strategy

• Provide a description of the response strategy being considered. This is likely to be a detailed description taken substantially from the ACP. It should include how the

¹⁹ It is not required that this planning template be formally written or completed during informal consultation, especially if no modifications to the strategy are required. However, it can be very useful in documenting the [team's] thought process for the administrative record, serving as a guide, or providing additional documentation as needed.

²⁰ The guide on "Developing Consensus Ecological Risk Assessments" provides procedures which may be helpful in exploring and analyzing these issues. Copies can be obtained from USCG Headquarters (G-MOR-2).

response action will be implemented, including equipment and methods. Examples include use of dispersants to avoid shoreline impacts, and deployment of booms to protect sensitive areas. Include all known aspects of the action, such as time frames, why the action is appropriate, indirect effects, etc. An example of an indirect effect may be hauling boom on, or driving vehicles through, a sensitive dune area to gain access to a spill site.

This should be developed by the action agency with the assistance of the Services.

- Provide a description of specific area that may be affected by the response strategy (i.e. Sample Bay, 100-mile section of outer coastline, etc.). Include some measure of the area potentially impacted (i.e., "This plan addresses oil spill response activities that may be conducted out two miles from the coast throughout the 100 mile coastline area encompassed by this ACP"). If different activities are being proposed in different areas, identify this. The team should discuss the appropriateness of presenting this information in terms of the activities that will be conducted within each area, or the areas where each activity will be conducted. For example, "Dispersants may be applied throughout the 10 mile coastline length of Area A and the 25 mile coastline length of Area B." Maps may be useful. This should be developed mainly by the action agency; however, modifications may be made with the assistance of the Services and subject to the approval process for chemical countermeasures in the NCP as appropriate.
- Identify how to quickly obtain species/habitat information during a spill (i.e. first refer to ACP and site summary sheet, call State FWS, check website, etc.). This should be developed jointly by the action agency and the Services.
- Identify emergency response points of contact to be notified during a spill. Establish spill parameters for notification as necessary. These should be included in emergency notification numbers as well as on any site summary sheets, in geographic response plans, etc.

This should be developed jointly by the action agency and the Services.

Description of the Affected Environment

• Describe the listed species and designated critical habitat areas that may be affected by the action in terms of overall range and population status. Include the number and location of known subpopulations within and adjacent to the action area (i.e., identify the areas known to be used by the species and, if appropriate, identify the specific times periods of use, such as February - April). Discuss the action area in relation to the distribution of the entire population (e.g., edge of the range, center of population abundance, key reproductive area, etc.). Present views of Service recognized experts on the species, if appropriate.

This should be provided by the Services.

- Ensure that these sensitive areas are referenced in the ACP (i.e. via ESI maps, specially generated GIS maps, site summary sheets, or other digitized format, etc.). This should be completed by the action agency.
- Provide biological data on listed species: historical use, presence, and potential use of habitat areas within the action area. Literature and other documents containing such information may be incorporated by reference. Provide species observation information, and recent results of species surveys, including, if appropriate, a description of methods, time of year surveys were performed, level of effort, and confidence intervals. Again, literature and other documents containing such information may be incorporated by reference. Maps may be useful to depict this information.

The Services should assist in developing this information. In many instances the Services will be able to supply this information from their records.

• Identify other designated sensitive areas, both adjacent to and within the proposed action area. These include National Wildlife Refuges, National Marine Sanctuaries, etc.

This should be developed jointly by the action agency and the Services.

Analysis of the Effects of the Action

- Describe all effects of the response strategy relative to the listed species of concern and its habitat, including designated critical habitat. This should include direct, indirect, beneficial, and cumulative effects as well as effects from interrelated and interdependent actions, if any.
 - This should be developed jointly by the action agency and the Services.
- Describe any measures that may avoid or lessen adverse effects as well as any measures that will enhance the species' present condition. If appropriate, delineate the locations of such measures. A discussion of environmental "tradeoffs" (including no action) may be appropriate. For example, "Dispersants may be toxic to the listed aquatic species when used in concentrations above 70%; however, oil coming ashore and smothering the listed species in tidal marshes is of greater concern due to the extremely poor conservation status of this species." Reference any already completed relevant reports, studies, biological assessments, etc.

This should be developed jointly by the action agency and the Services.

Modification to Strategy (as needed)

If necessary, after joint analysis of the information, the action or strategy may be modified.

• Describe the new strategy or action. For example, "Dispersants will not be used in

concentrations above X% or in areas less than three feet deep. They may be used in Area A and Area B. A Service representative from Regional field office B will be contacted during an oil spill response during the months of February - April in Area B."

This should be developed jointly by the action agency and the Services.

Documentation

This template is a guide to help you through the planning process, however, when sections are written out as the process is completed, the final document serves the same purpose as a biological assessment. It may be used to complete consultation pursuant to Section 7 of the ESA.

- The document should be maintained on file by the Services and may be referred to during an oil spill response.
- The Area Committee will ensure that this document becomes part of the ACP as appropriate such as:
- Included as an appendix to the Dispersant or In Situ Burn Operations Plan;
- Included as a reference document in the appropriate section of the ACP;
- Include relevant information in sections of the ACP such as Notifications, Site Summary Sheets, Geographic Response Plans, GIS maps, etc.
- The document should include points of contact from both the action agency and the Services.

APPENDIX D

SAMPLE POLLUTION REMOVAL FUND AUTHORIZATION (PRFA) LANGUAGE*

This Statement of Work (SOW) language is intended as sample language only. The language can be tailored to ensure that the FOSC is provided with the resources needed to meet the desired activities or functions required. Accordingly, more precise or succinct language may be used.

PRFA SOW additional/optional work elements to meet the FOSC's ESA mandated activities associated with removal actions:

.

To arrange for, and as appropriate coordinate with, the resources needed to meet the conference and consultation requirements of the ESA.

Specific activities anticipated under this requirement include:

- (a) Providing the expertise needed to make sensitive removal decisions which could potentially impact on listed species or critical habitats associated with this incident;
- (b) Gathering and documenting the information needed to provide input into the aforementioned decisions and to document the resulting impact of removal actions; and
- (c) As required, preparing the consultations required of the FOSC for the Service(s).

Funding under this agreement is provided for:

- (a) Salaries, travel and per diem;
- (b) Appropriate charges for use of equipment or facilities;
- (c) Any actual expenses for goods and/or services reasonably obtained in order to provide the agreed upon support to the FOSC removal activities (including contracts.)

^{*} Developed by the National Pollution Funds Center

APPENDIX E

SAMPLE LETTERS FOR REQUESTING CONCURRENCE OR FORMAL CONSULTATION

These sample letters have been developed to assist the Parties to this agreement in documenting the requirements of the Endangered Species Act. This is suggested wording only and may be used to complete the administrative record as needed. The request for concurrence can be used after the planning process for a particular area or countermeasure when it has been determined that no adverse effects will occur. The Services will provide a concurrence letter, as appropriate, for documentation. Alternatively, the request for formal consultation can be used after planning results indicate that adverse effects may still occur. If this is the case, the Services will evaluate the information developed jointly by the workgroup and issue a biological opinion.

Request for Concurrence Letter:

Mr./Ms. xxx U.S. Fish and Wildlife Service/National Marine Fisheries Service Division of Endangered Species

Dear Mr./Ms. xxx:

In accordance with the requirements of Section 7 of the Endangered Species Act, I am seeking your concurrence that the [Coast Guard's/EPA's] implementation of the [name of plan] is not likely to adversely affect the [identify the listed species and designated critical habitat that may be affected. Note, in cases where many listed species or critical habitat designations may be involved, it may be appropriate to refer to an attached list]. This [name of plan] has been developed with the assistance of [name of Service staff] of the U.S. Fish and Wildlife Service/National Marine Fisheries Service and in accordance with the procedures identified at 40 CFR Part 300, the National Contingency Plan. To assist in completing informal consultation, please find attached the Biological Evaluation that has been produced through the planning process described in the Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act using the Planning Template contained in Appendix C of that Agreement.

Thank you for your efforts in this matter. If you require additional information, please contact [provide a contact with a telephone number].

Sincerely,

Request for formal consultation:

Mr./Ms. xxx: U.S. Fish and Wildlife Service/National Marine Fisheries Service Division of Endangered Species

Dear Mr./Ms. xxx:

In accordance with the requirements of Section 7 of the Endangered Species Act, I am requesting the initiation of Formal Consultation on the effects of the [Coast Guard's/EPA's] implementation of the [name of plan]. Through informal consultation with your staff [or identify the appropriate Service office(s)], we have determined that implementation of spill response activities in accordance with the subject [name of plan] is likely to result in adverse effects to [identify the listed species and designated critical habitat that may be affected. Note, in cases where many listed species or critical habitat designations may be involved, it may be appropriate to refer to an attached list]. This [name of plan] has been developed with the assistance of [name of Service staff] of the U.S. Fish and Wildlife Service/National Marine Fisheries Service and in accordance with the procedures identified at 40 CFR Part 300, the National Contingency Plan. While these actions may result in short-term adverse effects, it is our belief that the species [and designated critical habitat areas] will ultimately benefit from them. To assist in completing Formal Consultation, please find attached the Biological Evaluation that has been produced through the planning process described in the Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act using the Planning Template contained in Appendix C of that Agreement.

Thank you for your efforts in this matter. If you require additional information, please contact [provide a contact with a telephone number].

Sincerely,

Section 3200 – Recovery & Protection

A. Overview

This portion of the job aid provides the means for developing recovery and protection strategies for inclusion in an ACP using the environmentally sensitive and economically significant areas (ESAs) identified in Section 4600 (Environmental). ESAs, when combined with recovery and protection strategies, inform the development of Geographic Response Plans (GRP) for a designated area. The actions identified in this Section of the Job Aid are critical steps that should be followed in order to develop a truly functional ACP.

Recovery and protection strategies focus on the following objectives:

- Protecting sensitive shoreline habitat, protected species, and marine sanctuaries;
- Minimizing impact on endangered species, essential fish habitats (EFHs), and national historical or cultural sites and landmarks;
- Removing as much oil from the surface of the water or recovering as much submerged oil (as possible); and
- Removing oil and contaminated materials from shoreline areas using appropriate techniques.

Strategies for securing the source (in the case of all facilities or vessels and/or reducing the flow rate in the case of an offshore exploration and production facility) should be found in Vessel Response Plans (VRPs), Facility Response Plans (FRPs), and Oil Spill Response Plans (OSRPs). Some of the information on procedures for securing offshore well discharges should be developed in Section 3700 (Planning for Subsea Containment, Source Control, and Subsea Dispersant Use) as well. Area Committees should be familiar with the information found in these industry plans.

Recovery and Protection Strategies are procedures for both on-water mitigation, as well as shoreline protection, including the identification of required equipment, its location, and availability. Strategies may include one or more response options, including mechanical recovery, in situ burning, or dispersant application.

As much as possible, strategies should be field tested, validated, and modified for maximum effectiveness prior to an actual event. Emphasis should be placed on applying the appropriate use of strategies during a response. The National Preparedness for Response Exercise Program (NPREP) Guidelines contain exercise requirements for testing strategies found in government and industry response plans (including ACPs). Best management practices (BMPs) should be captured during the testing of strategies to minimize impacts on ESAs.

While containment and mechanical removal will always be one of the primary options for the Federal On Scene Coordinator (FOSC), this section must additionally address the appropriate roles for dispersant use and in-situ burning, as appropriate, in order to maximize the net environmental benefit.

The information gathered on endangered species and critical habitats described in Section 4600 (Environmental) and the recovery and protection

Section 3200 1

strategies developed in Section 3200 should directly inform the Endangered Species Act (ESA) Section 7 consultation process with the Federal resource trustee agencies. The Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act and the ESA (Enclosure 1) contains very specific guidelines, including the pre-spill consultation processes, to evaluate the potential effects on endangered species in the local area. It is highly important for Area Committees to follow the steps outlined in Enclosure 1 in determining the appropriate scope and extent of consultation needed based on the potential impacts oil spill response activities would have on endangered species and critical habitats. Protection strategies and BMPs developed using guidance in this section should inform oil spill response activities that could adversely impact listed species and critical habitats. The ultimate goal of ESA Section 7 consultation is to ensure that oil spill response activities have minimal effects on listed species.

As discussed in Section 4600, protection strategies and BMPs developed using guidance in this section should also be used to determine the potential for oil spill response activities to adversely affect EFHs and sites of historical or cultural significance. See Section 4600 for more guidance on EFHs and National Historical Preservation Act (NHPA) Section 106 consultation process.

B. Area Committee Coordination

The Area Committee should coordinate with the Regional Response Team (RRT) to ensure that the appropriate policy and procedures associated with RRT-approved response options are captured in the ACP. The Area Committee should obtain, from their respective RRT, the most current information on dispersant pre-authorization, use, and incident-specific approval for inclusion in the ACP. It is highly important for Area Committee members to be familiar with this information so the most appropriate response options are considered and employed depending on the circumstances of the incident.

Similarly, in-situ burn (ISB) policy and procedures approved by their respective RRT should be established by the Area Committee and reflected in the ACP.

In developing Section 3200 of the ACP, a significant amount of coordination with stakeholders is critical for success. Key contributors to this planning process include natural resource trustees (e.g., DOI, USFW, NOAA), State OSC, State Emergency Managers, local representatives/elected officials, plan holders, and Oil Spill Response Organizations (OSROs). Outreach and participation in joint exercises with local counties and municipalities can greatly improve Area Committee coordination with stakeholders during a real event.

The GRPs containing these recovery and protection strategies should reflect protection priorities of the Area Committee and other stakeholders and be developed in consultation with the natural resource trustees. Furthermore, GRP development should incorporate procedures that ensure compliance with environmental laws and statutes.

C. Elements

The key elements of Section 3200 are:

- Develop Comprehensive Recovery and Protection Strategies
- Develop the inputs necessary to create a Geographic Response Plan(s)

3210 Response, Recovery & Protection Strategies

Introduction

Below are the actions to be taken to develop response, recovery and protection strategies for each ESA within the local Area.

STEP	ACTION	✓
1.	Describe the arrangement and/or configuration of response options that are expected to provide the most effective and efficient means of protecting each ESA in the event of a WCD. Include BMPs to ensure the maximum protection of sensitive resources. Describe the required amount of boom, locations for anchor points, access to site, collection points, typical tides and current patterns, and environmental conditions that may assist or impede oil spill response operations at the site.	
	Boom deployment configurations may include the following: • Diversion • Exclusion • Containment • Sorbent	
	It is possible that, due to the sensitivity or significance of certain areas, secondary or tertiary booming will be required. In those cases, the total amount of boom needed to implement the desired protection strategy must be calculated.	
	The arrangements and/or configurations may vary seasonally or due to other localized conditions and situations. In such cases, each anticipated variation in the arrangement and/or configuration should be described.	
2.	List in a table (or other format) the oil spill response equipment (e.g., boom, skimmers and skimmer systems, vessels, vacuum trucks, and support equipment, etc.) that is needed to implement each response strategy. This table should include the type of equipment, description of the equipment, the operating environment in which it may be used (protected water, offshore, etc.), the Effective Daily Recovery Capacity (EDRC) for skimmer systems, location, state of readiness (i.e., time to make operational), the number of personnel needed to operate the equipment, etc.	
3.	Identify and describe the location and layout of nearby areas for staging oil spill response equipment, including boom, skimmers and skimmer systems, vessels, vacuum trucks, and support equipment. Provide written description (and a printed map, if available) of the location of site, including GPS coordinates. Include a description of amenities and personnel that are available at each site. Boat ramps with sufficient	

	parking space are can be effective staging areas if located within reasonable distance of a potential spill location. Ensure this section contains information on the following:	
	 A unique identifier for each site using alphanumeric characters or other agreed upon convention Overhead photograph & map layout of each site Site location description, including GPS coordinates Available amenities or each site (e.g., electric, water, restrooms, etc.) 	
4.	Identify the storage locations/mooring areas for the different types of on water response equipment, including mechanical, in-situ burning systems and dispersants. The resources for on water recovery will be identified in Section 4300 (Resources). Provide the same information for storage/mooring areas as for staging areas in Step 3.	
5.	Identify those areas where shoreline recovery operations cannot be conducted (based on ESI shoreline types) and document the reasons for this determination. There are certain shoreline types that because of their sensitivity cannot support shoreline recovery operations. For example, it cannot be anticipated that shoreline recovery operations would occur in marshes, swamps, exposed tidal flats, etc. The resources for shoreline recovery will be identified in Section 4300 (Resources).	

3220 Develop Geographic Response Plan Inputs

Introduction Below are the actions to be taken to develop the inputs that will be used to generate the GRP(s) for the local Area.

- 1. Overlay the protection strategies on GRP maps (or similar graphic display) developed for the ESAs identified in section 4600. GRPs should contain (at a minimum) the following information:
 - Type and amount of required boom and the intended purpose of the boom (e.g., deflection, exclusion, containment, etc.)
 - Method for deploying boom for each area
 - Map that clearly shows the location(s) of deployed boom
 - Description and location of staging area
 - Collection points
 - Access to site
 - Detailed key describing map symbology and identifying characteristics
 - Limitations on access to areas surrounding the sensitive or significant area.

<u>Note</u>: An example of a GRP, including an overlay of protection strategies, is included in Section D, Examples.

D. Examples Below are examples of templates and GRPs that could be used to meet the requirements of Section 3200:

3210 Examples

- Table 1: Oil Spill Response Equipment Needed to Implement Recovery and Protection Strategies
- Table 2: Staging Area Summary Information
- Table 3: Storage/Mooring Area for On Water Recovery Equipment

3220 Example

• Example #1: Recovery and Protection Strategies Map and Narrative Description

3210 Examples

Table 1: Oil Spill Response Equipment Needed to Implement Recovery and Protection Strategies

Equipment Type	General Description	Quantity	Location	Operating Environment	EDRC (skimmers only)	State of Readiness, including anticipated transit time to WCD	Support Equipment Required, including personnel required to operate

Table 2: Staging Area Summary Information

Staging Area Name	Unique Staging Area ID (e.g., alphanumeric designation)	Staging Area General Location & Layout	Staging Area GPS Coordinates	Equipment that Staging Area Could Handle (e.g., vessels, vacuum trucks, and support equipment	Amenities Available at the Site (e.g., bathrooms, boat ramp, etc.)

Table 3: Storage/Mooring Area for On Water Recovery Equipment

Storage/ Mooring Area Name	Unique Storage/Mooring Area ID (e.g., alphanumeric designation)	Storage/ Mooring Area General Location & Layout	Storage/ Mooring Area GPS Coordinates	Equipment stored at this location (e.g., mechanical, in-situ burning systems and dispersants equipment)

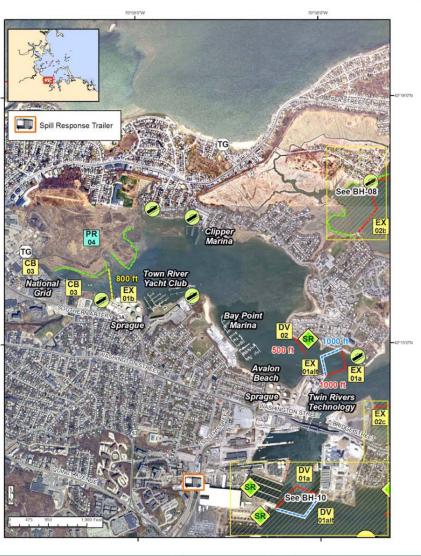
3220 Examples

Example #1: Recovery and Protection Strategies Map and Narrative Description



Boston Harbor Geographic Response Plan

Town River BH-9





A total of 2 State Response Trailers are required to implement all of the tactics in this GRP. Responders should always consider on-scene conditions before deploying GRP tactics. Tactics may not be safe or effective under certain conditions. Responder safety should always be the first priority. The strategies contained within this plan have been designed to mitigate a potential off-shore or off-site release that could impact the subject plan area. When responding to other types of spills these tactics will likely require significant modification.

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Nuka Research and Planning Group, LLC





Boston Harbor Geographic Response Plan Town River BH-9

ID	ID Location and Description Response Strategy Implementation				
ID	Location and Description	Response Strategy	1 m piementation		
BH-09-01	a.) Mouth of Town River Lat. 42°14′54.96″N Lon. 70°57′55.44″W The following strategy was developed by Sprague. In the event of a spill by Sprague, this tactic would be deployed using their equipment. b.) Sprague Facility Lat. 42°15′13.74″N Lon. 70°59′7.42″W	Exclusion Set boom across the mouth of Town River to prevent oil from entering and moving towards the marsh.	Deploy anchors and boom with skiffs. Extend at least 1000ft of boom across the mouth of the Town River in a closed chevron formation. The boom should extend from the shore near the end of St Germain Street to the edge of the Twin Rivers Technology facility. On ebb tide, deploy the alternate strategy. The shoreside anchors will still be place at the same locations, but the apex of the chevron will be inverted. b.) This strategy was designed by Sprague. Deploy 800ft of boom in a single leg from the Sprague facility towards the marsh. Set anchors every 200ft and tend throughout the tidal cycle.		
BH-09-02	Shoreline located near the entrance to Town River Lat. 42°15′0.75″N Lon. 70°58′5.47″W	Divert and Collect – Shoreside Deploy protected water boom to divert oil to collection point.	Deploy anchors and boom with skiffs. Extend 500ft of boom in a Southeasterly direction from the shore located near Taffrail Road. Set up recovery tactics on the beach. Set anchors every 200ft and tend throughout the tidal cycle.		
BH-09-03 CB TG	Culverts located near: Lat. 42°15'9.55"N Lon. 70°59'22.52"W and Lat. 42°15'22.39"N Lon. 70°59'37.53"W	Culvert Blocking Exclude the flow of oil through the culverts. Tide Gate Prevent oil from entering the tide gate.	At low tide, place an inflatable culvert plug in the culvert. Note that although it is preferable to block the culvert on the ebb tide, it is most important to implement as early as possible. If the inflatable plug is not available, place plywood or similar sheeting material across the entrance of the culvert. Use plastic sheeting to ensure the seal. Stack adequate sandbags against the plywood sheeting to counter the out flow pressure from the intertidal area. Monitor the block to ensure blocking integrity. Contact Public Works to close the tide gate.		
BH-09-04	Marshes located at the Western end of Town River Lat. 42°15'21.13"N Lon. 70°59'2.47"W	Passive Recovery Place passive recovery tactics to recover oil and prevent it from entering sensitive areas.	Place snare or sorbent boom along marsh front to minimize damage and facilitate recovery. Replace as necessary to maximize the recovery. If oil threatens to enter mosquito ditches, use available materials to close off the ditch channel to prevent oil from migrating further into the area. Line with sorbent or snare boom to absorb any oil that migrates into the mosquito ditch. Replace as necessary to maximize the recovery.		

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Boston Harbor Geographic Response Plan Town River BH-9

ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
ВН-09-01	Deployment Equipment (for a) 1000 ft 18" boom 4 anchor systems 2 anchor stakes Vessels 2 skiffs Personnel/Shift 6-8 total (1 vessel operator + 1 responder per vessel, 4 shoreside responders) Tending Vessels 1 skiff Personnel/Shift 3-4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)	Site Access: There are boat ramps located at Town River Marina (off of 3A), Town River Yacht Club (off of Cove Way) and Clippers Marina (off of Palmer Street). There are smaller ramps located at the end of Delano Avenue and St Germain Street. NOAA Chart 13270	Marine Mammals – Harbor Porpoise, Harbor Seals Fish – Anadromous, Finfish Birds – Shorebirds Invertebrates – Lobster, crab, shrimp, shellfish Human Use – Beach, Marina, Boat Ramp, Recreational Fishing Habitat - Beach, Marsh/Swamp, Rocky, Riprap, Tidal Flats	Vessel master should have local knowledge. Tested: not yet. Consider the time of year and relative presence of recreational boats when preparing to implement these strategies. Consult with the local harbormaster to develop a plan to address the presence of recreational boaters. Consider encouraging the immediate removal of recreational boats from target areas in the event of a spill if time allows
BH-09-02	Deployment Equipment 500 ft 18" boom 3 anchor systems 1 anchor stakes 1 shoreside recovery system Vessels 2 skiffs Personnel/Shift Same as BH-09-01 Tending Same as BH-09-01	Same as BH-09-01	Same as BH-09-01	Same as BH-09-01
ВН-09-03 СВ ТG	Deployment Transport 1 Truck Equipment 2 Inflatable Culvert Blockers OR 2 sheets of plywood 100-200 sandbags 2 Polyethylene Sheeting Vessek/Personnel/Shift & Tending Same as BH-09-01	Same as BH-09-01	Same as BH-09-01	Contact Public Works to close the tide gate. Responders implementing this strategy should immediately consult with UC and appropriate local officials knowledgeable in the operation and limitations of culvert system. If this strategy is implemented the culvert system must be monitored throughout the tidal cycle. Special considerations include potential localized flooding and personnel injury.
ВН-09-04 PR	Deployment Equipment 3000 ft. of snare or sorbent boom 30 anchor stakes Personnel/Shift 8 shoreside responders	Same as BH-09-01	Same as BH-09-01	Use snare boom for persistent oils and sorbent boom for non-persistent oils. Responders should determine if attempting to deploy the boom would do more harm to the marsh.

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Boston Harbor Geographic Response Plan

Town River BH-9

Site Photographs and Contact Information



Sprague Tanks, Town River Marina and Town River Yacht



Boat Ramp located at Town River Yacht Club



Culvert located near National Grid



Marshes located at the Western end of Town River



View of Twin Rivers Technology from the North

Contact Information

City of Quincy – Public Works: 617-376-1910
Dept of Conservation & Recreation Rangers (24 Hour): 617-722-1188
US Coast Guard – Sector Boston (24 Hour): 617-223-5757
Mass. Dept of Environmental Protection (24 Hours): 888-304-1133
Quincy Police: 617-479-1212
Quincy Fire (24 Hour): 617-376-1011
Braintree Fire Department: 781-843-3600
Weymouth Fire Department: 781-337-5151
Weymouth Harbormaster (781) 682-6109
Twin Rivers Technology: 617-472-9200
Sprague: 617-847-0994

Bay Point Marina: 617-471-1777 Town River Yacht Club: 617-471-2716

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Section 4300 Resources

A. Overview

This portion of the job aid provides the means for identifying, validating, and planning for oil spill response equipment resources during an incident and for developing the Resources Section of the ACP.

Section 4300 has not traditionally been viewed as a detailed description of response resources nor has there been an obvious connection between Resources (Section 4300) and Protection and Recovery Strategies (Section 3200). Historically, Section 4300 has also not been used effectively to determine equipment gaps and response equipment capability based on the scenarios for WCD.

It is important for the FOSC and Area Committee to have awareness and visibility on the types, locations, and capabilities of response equipment both within the local Area (corresponding to the geographic boundaries that are described in the applicable ACP), the region, as well as the means of surging equipment from outside of the region to the incident site.

Section 4300 should identify both private and public sector response equipment within the region that may be available and used during a major oil spill, including non-traditional response assets such as DOD or State and local command and control capabilities for other types of emergency management and response.

A challenge that exists for planners is that OPA 90 dictates that ACPs, VRPs, FRPs, and OSRPs show the capability to respond to a WCD in adverse weather. Local Area considerations, however, may require substantially more oil spill response equipment, such as protective containment boom, to be required due to the number, priority, and external factors associated with protection of Environmentally Sensitive or Economically Significant Areas. Finally, on-site weather conditions, such as ice or frequency of hurricanes can have a significant impact on the amount and type of response equipment needed during a major spill event.

The Response Resource Inventory (RRI) (https://cgrri.uscg.mil), which is managed by the National Strike Force Coordination Center (NSFCC), is the Coast Guard's primary tool for the classification of OSROs and the principle means of identifying nationally available oil spill response equipment from classified OSROs. The RRI database is a voluntary reporting system for all classified OSROs that contains contact information, site locations, and owned and contracted pollution response equipment that is used by OSROs to show their ability to respond to spill size categories mandated by regulation. It may be used to form the basis of identifying response equipment capabilities in the ACP. However, the RRI is not a tactical response tool nor is it necessarily a complete listing of all equipment that may be available. Nevertheless, it is a tool that may be used by planners to initiate the planning process of identifying response equipment that may be available outside of RCP and ACP geographic areas.

The actions identified in this Section of the Job Aid are critical in a multi-step process to develop a high quality ACP. This process includes:

- Inventory the available equipment within the local Area and adjacent areas that may be applied to the Recovery and Protection Strategies (Section 4300).
- Determine the shortages in equipment requirements for implementing the aggregated Recovery and Protection Strategies (Section 4300).

Determine the means to fill these shortages (Section 4300).

B. Area Committee Coordination

Since most of the response equipment for any size or type of spill will be provided by industry (i.e., the Responsible Party (RP) primarily through an OSRO or OSROs identified in the a FRP, VRP, or OSRP), it is paramount for the Area Committee to include both plan holders and OSRO representatives in Area Committee discussions and in the planning process for determining the type, amount, and capabilities of equipment.

It is also important for the Area Committee to understand not only the types of equipment that are available, but also the operational capabilities and limitations of that equipment. Equipment used to support the response to any size spill must be appropriate for the operating environment (e.g., offshore, nearshore, inshore), and must align with the recovery and protection strategies (Section 3200) developed by the Area Committee.

C. Elements

The key elements of Section 4300 are:

- Create an inventory of the available equipment within the local Area and adjacent local Areas that may be applied to the various Recovery and Protection Strategies developed as a part of Section 3200
- Determine the shortages in equipment requirements for implementing all of the aggregated response and protection strategies
- Determine the means to address the identified equipment shortages

4310 Creating an Inventory of Available Equipment within the Local Area and Adjacent Areas

Introduction

Below are the actions to be taken to develop a comprehensive inventory of oil spill response equipment and support systems in the local Area and adjacent areas.

STEP	ACTION	✓	
1.	Establish a relationship with the appropriate District Response Advisory		
	Team (DRAT) to coordinate data gathering regarding response	1	
	equipment, including Coast Guard prepositioned equipment (e.g., first-aid	1	
	railers, VOSS units, SORS-equipped WLBs).		
2.	Consult the RRI and list in a table the types, amount, and location of oil		
	spill response equipment within and adjacent to the local Area. This table		
	should include the type of equipment, description of the equipment, the		
	operating environment in which it may be used (protected water, offshore,		
	etc.), the Effective Daily Recovery Capacity (EDRC) for skimmers only,		
	location, state of readiness (i.e., time to make operational), etc. Equipment		
	should also be evaluated in terms of the systems that are necessary for the	1	

appropriate use of the equipment, such as temporary storage capacity, support vessel requirements, boom connectors, etc. Types of equipment include, but are not limited to:

Mechanical recovery equipment:

- Boom and Boom hardware (including anchors, connectors, etc.)
- Skimmers (e.g., ocean, coastal, inland skimming vessels)
- Skimmer systems
- Small boats
- Vacuum trucks

Dispersant application equipment:

- Aircraft
- Air delivery systems
- Surface delivery systems
- Dispersant stockpiles
- Surveillance and detection aircraft

In-situ burn equipment:

- Fire boom
- Ignition/accelerant supplies

Subsea containment equipment:

- Helix or MWCC source control equipment & technology
- Capping stacks
- Subsea dispersant injection systems
- Surface recovery platform (e.g., tanker or barge)

Specialized equipment:

- Heavy lift crane barges
- DOD skimmers & equipment (e.g., "Buster" skimmers)
- Offshore skimmers
- 3. Identify and list in a table the OSROs and cooperatives within the local Area and adjacent areas that may not be included in the RRI and consult with them regarding their equipment inventories, locations, plans for deployment, etc. This table should mimic the table described in Step 1.

<u>Note</u>: Types of equipment to include in this table are listed in Step 1 above.

<u>Note</u>: OSROs should be encouraged to enter information related to their non-classified equipment into the RRI.

4. Identify and list in a table the other response capabilities within the local Area and adjacent local Areas that may not be associated with OSROs, but may be used during a response (e.g., DOD command and control equipment and aviation resources, State-owned command and control and spill response equipment, Tribal-owned equipment, and international equipment under terms of bilateral agreements, etc.). If a Vessel of Opportunity Program exists and there are identified and trained privately owned vessels that may be made available during a response to a WCD, the information should be included as part of this Step.

This table should include necessary information to allow the Area Committee and the FOSC to have a clear understanding of these other response resources and their capabilities. Note: Types of equipment to include in this table are listed in Step 1 above and other types of non-oil pollution response equipment and capabilities that may be used during a response, for example, State, County, and local emergency management resources. Note: The information from Steps 1-4 can be combined into a single table, with a separate column that identifies the source of information. See Section D, Examples. Reach out to plan holders, OSROs, salvage companies, and other industry 5. resources providers in local Area to encourage participation in the Area Committee. A letter may be appropriate but personal communications with the responsible person has shown to be the most effective means of Coordinate with NSFCC to participate in the Preparedness Assessment 6. Visits (PAV) to Classified OSRO sites within the local Area. Participation in the PAV is important for planners because it provides an opportunity to: Verify the resources listed within the Response Resource Inventory. Complete a visual equipment survey of the material condition of the response resources. Ensure the response resources are properly maintained and ensure that the maintenance is documented. Ensure the OSRO has sufficient personnel available and trained to mobilize, deploy, and operate the equipment identified in the OSRO application; that personnel meet the Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements in 29 CFR 1910.120; and that such is documented. Verify a cross-section of the inventory for systems operability and logistics support capability. Test a minimum of 10% of the operational equipment (vacuum trucks, pumps, etc.). Review records of participation in exercises. Review the site's logistics narrative (where applicable) and determine the status of the support services listed in the narrative (e.g., equipment rentals, commercial drivers, and personnel services, etc.) and their ability to mobilize and sustain the resources.

4320 Determine the Shortages in Equipment Requirements for Implementing all Response and Protection Strategies

Introduction Below are the actions to be taken to identify any equipment shortfalls that may exist and prevent the implementation of all Recovery and Protection Strategies for the environmentally sensitive and economically significant areas in the local Area.

STEP	ACTION	✓
1.	Determine the oil spill equipment requirements needed to implement the Response and Protection Strategies for the environmentally sensitive and economically significant areas (Section 3200). After creating a comprehensive equipment inventory for the local & adjacent Areas (as described in Section 4310), conduct a gap analysis to determine the types and amount of additional equipment that will need to be surged in from outside the local Area (regionally, nationally, or internationally).	
2.	Describe the equipment shortages identified in conducting the gap analysis . Equipment should be categorized by equipment type, operating environment, and other appropriate measures that will provide sufficient information to allow for the identification of the means to address shortfalls.	

4330 Determine the Means to Address all Equipment Shortages

Introduction

Below are the actions to be taken to identify and fill equipment shortages that may need to be surged in from outside the local Area and adjacent local Areas in order to the implement all of the Recovery and Protection Strategies for the environmentally sensitive and economically significant areas in the local Area.

STEP	ACTION	✓
1.	Identify and list in a table the potential sources for equipment outside the local Area , including the logistical and time requirements for this equipment to reach the local Area.	
	Note: It is anticipated that CGHQ will be working this issue with Industry and State representatives that have response equipment requirements, legal liability restrictions, and movement limitations. In the meanwhile, planners should note that plan holders and equipment providers (especially OSROs under contract to plan holders) may be legally impeded from moving oil spill response equipment from one Area to another. During a WCD scenario, these equipment surge issues may need to be elevated to the regional or national level for resolution.	
2.	If the local Area is immediately adjacent to an international boundary, identify and document the procedures and contact information for requesting the deployment of international oil spill response equipment. DRAT personnel will be useful in determining if there are existing bilateral agreements with neighboring countries that would expedite the	

	movement of equipment across international boundaries for use during a	
	major spill event.	

4340 Response Equipment Surge for Large Scale Oil Spill Response

Overview

Our current pollution response equipment surge strategy is built on the cascading of equipment within a localized area or within a region. This strategy supports the daily operations within a port and provides the surge capability for most WCD scenarios within an ACP. As demonstrated during the DEEPWATER HORIZON (DWH) response, this existing pollution response equipment surge strategy is not designed to support large-scale national movement of oil spill response resources. DWH demonstrated that the ability to identify and surge critical resources from national and international inventories is essential to an oil spill response of this magnitude. While there was a willingness of industry, Oil Spill Removal Organizations (OSROs), and suppliers to quickly provide response resources during the DWH response, surging equipment from outside the affected region encountered several obstacles. Despite adjusting federal response times to accommodate equipment movement, state regulations were not factored in and even with relaxed response times, federal and states agencies could not remove limits of liability for the plan holder. Additionally there was a reluctance to move too much equipment out of potential donor areas for fear of leaving those areas vulnerable.

During a situation like DWH, donor areas may be identified to provide equipment and pre-identification of response equipment that can be moved will facilitate the mobilization of these resources to the area in need and can provide donor areas with a calculated level of risk of moving that equipment.

The challenge that exists with the pre-identification of response equipment to support this type of event is that vessel and facility response plan holders will still need to remain compliant with federally and state mandated response times. In addition, OSROs are still liable under their contractual agreements with these planholders. Unless measures are taken at the federal and state level to relax these response times, planholders and OSROs will need to maintain their response equipment capabilities to meet required timeframes.

Led by CG-MER, there are ongoing initiatives intended to assist Area Committees and COTPs in addressing these challenges and pre-identifying of "donor" response equipment while assessing the risks of sending identified equipment out of the local Area. The state of Washington for example developed a GAR model type system during DWH to evaluate the types of equipment available in their local Area and the impact (on a green, amber, red scale) of donating that equipment to the response.

STEP	ACTION	✓
1.	The FOSC and Area Committee need to have awareness and visibility on	
	the types, locations, and capabilities of response equipment both within	
	the local Area (corresponding to the geographic boundaries that are	
	described in the applicable ACP) and the region. It is important that	
	discussions are started on how pre-identify equipment and understand	

	potential impacts if equipment is surged out. These discussions should include the state as well as industry (OSROs and planholders).	
	During these discussions it is important to consider the use of alternative compliances such as limiting certain activities within the port like lightering to daytime operations only or reducing administrative controls on planholders if response equipment within the port has been reduced in support of a SONS response.	
	Area Committees should support and increase education, outreach and awareness of this issue. This can be supported through PREP exercises of a large scale equipment surge, discussing and documenting political and media barriers that would need to be addressed if equipment was moved out of the area and working with industry to gain a better understanding of liability issues within the port.	
2.	(Note: This section will serve as a place holder for future guidance to Area Committees on how to conduct risk assessments and evaluate local equipment inventories for donation.)	

D. Examples Below are examples of the different elements of Section 4300:

4310 Examples

- Table 1: Mechanical Recovery, Temporary Storage, and support equipment
- Table 2: Dispersants
- Table 3: Dispersant support equipment
- Table 4: ISB equipment
- Table 5: Subsea containment and support equipment
- Table 6: Other Specialized Equipment

4330 Examples

- Table 7: Out-of-Area Equipment Potentially Needed to Respond to a WCD
- Table 8: International Equipment Potentially Needed to Respond to a WCD
- Table 9: Contact Information for International Equipment

4310 Examples

Table 1: Mechanical Recovery, Temporary Storage, and support equipment

				8-7			
Equipment	General	Quantity	Location	Operating	EDRC	State of	Support
Type	Description			Environment	(skimmers	Readiness,	Equipment
					only)	including	Required,
						anticipated	including
						transit time	personnel
						to WCD	required to
							operate

Table 2: Dispersants

20010 21 210	Personal					
Dispersant	General	Quantity	Location	State of	Additional	Special Handling and
Туре	Description	(gallons)		Readiness, including personnel required to operate	Support Equipment Required, if any (Yes/No) (List details in Table 3)	Storage Considerations, if any

Table 3: Dispersant support equipment

	persume supp.	91 t t q 41-p 111				
Equipment	General	Quantity	Location	Operating	State of	Special
Type	Description			Environment	Readiness,	Handling and
					including	Storage
					personnel	Considerations,
					required to	if any
					operate	

Table 4: ISB equipment

1 able 4. 151	equipment					
Equipment Type	General Description	Quantity	Location	State of Readiness, including personnel required to	Additional Support Equipment Required, if any	Special Handling and Storage Considerations, if any
				operate		

Table 5: Subsea containment and support equipment

			F F F			
Equipment	General	Quantity	Location	State of	Additional	Special Handling
Туре	Description			Readiness, including personnel required to operate	Support Equipment Required, if any	and Storage Considerations, if any
				орегие		

Table 6: Other Specialized Equipment

10010 01 011						
Equipment	General	Quantity	Location	State of	Additional	Special Handling
Type	Description			Readiness,	Support	and Storage
				including	Equipment	Considerations,
				personnel	Required,	if any
				required to	if any	
				operate		

Section 4330 Examples

Table 7: Out-of-Area Equipment Potentially Needed to Respond to a WCD

Equipment	General	Quantity	Location	Transit	Additional	Special Handling
Type	Description			Time to	Support	and Staging
				local Area	Equipment	Considerations,
					Required,	if any
					if any	

Table 8: International Equipment Potentially Needed to Respond to a WCD

Tuble of Inc	Tuble of international Equipment I otentially 1 (ceased to itespond to a 11 CE						
Equipment	General	Quantity	Location	Transit	Additional	Special	
Type	Description			Time to	Support	Handling and	
				local Area	Equipment	Staging	
					Required,	Considerations,	
					if any	if any	

Table 9: Contact Information for International Equipment

Organization Name	Address	Contacts	Official Phone	Business Phone

Section 3700 – Planning for Subsea Containment, Source Control, and Subsea Dispersant Use

A. Overview

This portion of the job aid provides a recommended approach and examples to describe and enhance the Subsea Containment, Source Control Measures, and Subsea Dispersant Use sections in ACPs. It principally applies to those local Areas in which offshore exploration and production (E&P) activities are occurring or planned; however, local Areas that may be impacted by a WCD from any offshore facility should use this Job Aid as well.

Section 3700 is a reserved section of the ACP. It will now be used to describe the planning process to address the unique challenges resulting from a WCD from an offshore oil exploration and production facility. While the focus of this section is on information contained in Oil Spill Response Plans (OSRPs), which are approved by the Bureau of Safety and Environmental Enforcement (BSEE), OSROs and subsea containment companies (Marine Well Containment Company (MWCC), Helix Well Containment Group (HWCG), etc.) generally serve as resource providers for the equipment that would be needed to manage the loss of well control and need to be part of the process for determining strategies and capabilities for mitigating those discharges. It is critically important for the FOSC and the Area Committee to have a fundamental understanding and awareness of the procedures that will be followed, the equipment that will be deployed, and the plan holder's capabilities for dealing with an offshore oil spill.

B. Area Committee Coordination

Planning for subsea containment, source control measures, and subsea dispersant use requires a high degree of coordination and interaction with BSEE in those COTP Zones in which there is offshore energy E&P activities. FOSCs should ensure that BSEE representatives are given the opportunity to participate in Area Committee meetings that may be affected by offshore E&P and that Area Committees are fully cognizant of OSRPs in their areas of responsibility. An observed best practice is to develop a subsea containment subcommittee of the Area Committee. Subcommittee membership may include:

- States (including potentially impacted adjacent states)
- BSEE (participation is critical for offshore response planning)
- Representatives from HWCG/MWCC/other subsea containment and control entities
- OSROs
- Plan holders
- Local stakeholders including, but not limited to, elected officials, port officials, emergency managers, etc.

Area Committees in local Areas that may be impacted by a WCD from an offshore E&P facility should consider establishing similar Subcommittees in order to coordinate planning among potentially affected local areas and to gain a better understanding of offshore E&P activities that may impact their local Area. The FOSC and Area Committee should be knowledgeable of, and familiar with, the OSRP sections required to complete the ACP. The FOSC needs to be cognizant of new OSRPs as they are submitted or significant changes made to existing OSRPs that impact WCD volumes. The FOSC must ensure that these changes are reflected in the latest version of the ACP.

C. Elements

The key elements of Section 3700 are:

- Subsea containment, well control measures and equipment locations and deployment
- Subsea dispersant approval and use

3710 Sub-sea Containment, Well Control Measures and Equipment Locations and Deployment

Introduction

Below are the actions to be taken to develop a summary of the critical containment systems and well control measures and the response timeline to deploy this equipment to the offshore facility that provides the WCD.

<u>Note</u>: The information described below is currently being organized into standard documents by BSEE, well control companies and operators. Timeline for completion is August 2012.

STEP	ACTION	✓
1.	Coordinate with the BSEE Regional Officer and the subsea well containment entity cited in the OSRP to develop this section of the ACP.	
2.	Name the subsea well containment entity or entities named in the OSRP for the offshore facility identified in Section 9400 that may be the source of the WCD.	
3.	Describe the entire containment system and its components, including the subsea components, well-containment measures, surface support systems and components, including temporary storage methods.	
4.	Describe the operating capabilities of the system and its components. For example, containment capacity, support processes, temporary capacity, etc.	
5.	Describe the interface between the subsea containment system and surface systems for oil spill recovery control and containment.	
6.	Describe the operating limitations for the subsea containment systems and components, especially pressure/volume limitations on capping, cap and flow or other control and containment measures.	
7.	Include diagrams/pictures/illustrations that depict all of the systems and/or components.	
8.	Describe any additional requirements for the subsea well containment entity deemed necessary by the Area Committee and/or FOSC for inclusion due to the operating environment or other special situations in the local Area.	
9.	Identify location of all subsea containment and well control and containment equipment and the means proposed by the subsea containment entities for moving equipment to the offshore facility or location of the release.	
10.	Restate the Initial Response Timeline included in the OSRP. This timeline should contain the lead time for getting critical equipment, contractors and supplies, etc. to the offshore facility that provides the WCD scenario. Include important milestones and details from the Initial Response Timeline in the ACP.	
11.	Review the latest NRT guidance on subsea dispersant use and incorporate its use and procedures, as appropriate, in the WCD scenario for offshore E&P facilities.	

3720 Subsea Dispersant Use

Introduction

Below are the actions to be taken to develop a summary of the subsea dispersant plan and dispersant capability in the local Area that can be directed to the offshore facility that provides the WCD scenario.

STEP	ACTION	✓
1.	Review the subsea dispersant plan in the OSRP or Facility Response Plan	
	(FRP), as appropriate, for the offshore facility that provides the WCD and	
	ensure that it is in alignment with the RRT dispersant policy and	
	procedures contained in the ACP. Any discrepancies between the ACP	
	dispersant plan and the OSRP dispersant plan (Section 18 of the OSRP)	
	should be addressed through the Area Committee to ensure coordination	
	with the BSEE Regional Office.	
	Note: From though this ish aid anniles only to the facility that has the	
	Note: Even though this job aid applies only to the facility that has the	
	WCD, this step needs to be employed to validate the subsea dispersant	
	plans found in other OSRPs or FRPs for the local Area.	
2.	The Area Committee should coordinate with the RRT to ensure that the	
	appropriate dispersant policy and procedures are included in this section	
	of the ACP. Any changes made to the RRT Dispersant Plan should also	
	be reflected in this section of the ACP.	
3.	Describe dispersant capability in the local Area, including the support	
	systems (e.g., locating, applying, monitoring, etc.), operational	
	limitations, locations of dispersant stocks and application equipment, etc.	

D. Examples

In developing the different elements of Section 3700, specific sections of OSRPs should be reviewed to ensure alignment with ACPs. Specifically, there is value in reviewing the response strategies and equipment resources listed in OSRPs to assist in developing this section. Information found in OSRPs will directly influence the contents of this section related to subsea containment, source control measures, and subsea dispersant use.

Section 32XX Waste Management and Disposal Contingency Planning (part of Section 3200 Recovery and Protection)

A. Overview

This section of the job aid provides guidance on calculating the amount and type of waste expected to be generated by a major spill event and determining whether plan holders and OSROs (and other contractors or vendors) in a local Area have sufficient resources to ensure that this waste will be properly handled, transferred, stored, treated, and/or disposed of.

This section of the ACP complements Section 32XX, Sample Waste Management Plan, which serves as a process for developing and implementing a Waste Management and Disposal Plan during an actual incident. Every Area Committee is encouraged to leverage the knowledge and experience of its OSRO, EPA, and State members in developing both of these waste management and disposal sections of the ACP.

Understanding and calculating the amount of waste management generated by an incident and the fate of all of the oil spilled is an integral part of the incident planning process. The volume of waste generated during oil spill response operations is a function of the nature of the spill and the decisions made by the SMT that select the treatment and cleanup methods. Mechanical response strategies result in the collection of oily wastes products that require handling, transfer, treatment, storage, and/or disposal. In contrast, the use of dispersants and burning generate significantly less waste.

For large and complex oil spill incidents, including SONS, EPA representatives can provide subject matter expertise on all aspects of waste management. In addition, the FOSC should leverage EPA knowledge and experience to ensure appropriate federal, state, and local requirements for waste management are being followed. It is highly important to also include the EPA in waste management planning activities by the Area Committee.

B. Elements

The key elements of Section 32XX are:

- Identifying waste management capacity and resources in the Local Area
- Understanding waste types, classifications, and regulatory requirements for handling different types of oily wastes products in the local Area
- Determine the volumes of solid and liquid waste streams expected to be generated during a major incident

32XX Identify Waste Management Capacity in the Local Area

Introduction

Below are the actions to be taken to identify the capacity and resources available within the local Area to manage the volume of oily wastes expected to be generated during an incident.

STEP	ACTION	✓	
1.	Understand the Federal regulations, state statutes and regulations, as well as waste management and disposal plans and procedures that exist in the local Area and adjacent Areas. This includes:		
	• Resource Conservation and Recovery Act and implementing regulations (40 CFR 260)		
	Applicable state statutes/regulations/authorities		
	• Relevant inter-agency Memorandums of Understanding and Agreement		
	• Facility Waste Disposal Plans for those facilities that have the highest INCIDENT. In those areas where the District is reviewing the OSRPs for offshore facilities, the Area Committee should connect with the District to obtain this information.		
	OSRO Waste Management & Disposal Plans		
2.	Establish waste minimization policies and procedures to be used during response operations. This should be done in order to help reduce the total amount of waste that will be generated by response activities.		
3.	Determine the volumes of solid and liquid waste streams expected to be generated by a WCD from an offshore facility, onshore facility, and vessel. Consult with the NOAA SSC and local OSROs to get estimates of these volumes.		
4.	Define waste types, classifications, and regulatory requirements for handling different types of oily wastes products in the local Area.		
5.	Identify the equipment needed to temporarily store and transport wastes and the procedures that should be followed (in accordance with applicable regulations).		
6.	List in a table the OSROs (or other contractors or vendors) that can aid with waste handling, transport and disposal in the local Area, the type of waste(s) they can handle, and locations where they can dispose different type(s) of waste in the local Area.		
7.	If the volume of wastes expected to be generated by an incident is greater than the waste handling, transport and disposal capacity available in the local Area, identify the certified waste handlers, haulers and disposal locations in adjacent regions or COTP Zones. Other ACPs may need to be referenced		

C. Examples Below are examples of the sections of Appendix 32XX:

- Table 1: Hazardous Material Transporters (template)
- Table 2: Hazardous Waste Treatment, Storage, & Disposal Facilities (template)

Table 1: Hazardous Waste Transporters

Vendor/Contractor/ OSRO Name	Contact Name and Phone Number	EPA Identification Number	EPA Hazardous Waste Code(s) Transporter can haul	State Hazardous Waste Code(s) Transporter can haul	Transport across state lines? (Y/N)

Table 2: Hazardous Waste Treatment, Storage and Disposal Facilities

Facility Name	Contact Name and Phone Number	Address	EPA Identification	Types & Amount of waste the
			Number	facility can treat, store, dispose of or recycle

Section 32XX.X Sample Waste Management and Disposal Plan (part of Section 3200 Recovery and Protection)

A. Overview

This section of the job aid provides guidance on developing a Waste Management and Disposal Plan template that can be used for any oil spill event regardless of size. Pursuant to the NCP, oil and contaminated materials recovered in cleanup operations shall be disposed of in accordance with RCPs, ACPs, and any applicable laws, regulations, or requirements. These contingency plans should provide direction for waste management activities, including containment, countermeasures, cleanup, and disposal pursuant to 40 CFR § 300.310. Additionally, the ACPs may identify a hierarchy of preferences for disposal alternatives, with recycling (reprocessing) being the most preferred and other alternatives ranked based on priorities for health or the environment [40 CFR § 300.310(c)]. The FOSC may use Clean Water Act (CWA) § 311 authority to order a responsible party to properly manage waste from an oil spill.

This section of the ACP complements Section 32XX, Waste Management and Disposal Contingency Planning, which describes how to calculate the amount of waste expected to be generated and determine whether the OSROs (and other contractors or vendors) in a local Area have sufficient resources to ensure that this waste will be properly handled, transferred, stored, treated, and/or disposed of. Every Area Committee should leverage the knowledge and experience of its OSRO, EPA, and State members in developing both these sections of the ACP.

The purpose and scope of a Waste Management and Disposal Plan includes the following elements:

- Procedures to reduce the overall cost of waste management activities through effective waste management planning across the affected area;
- Identifies waste management regulatory, staffing, and resource needs across all affected states and regions;
- Waste sampling and analysis process to characterize the wastes;
- Waste management strategies for each waste type, including collection, segregation, staging, temporary storage, minimization, treatment, and disposal;
- Identification and assessment of waste recycling, treatment, storage, and disposal facilities that will process the amounts of waste anticipated;
- Identification of waste acceptance criteria, sampling, labeling, and tracking requirements for each waste management facility to be utilized in the waste management response;
- Transportation plan describing how wastes will be transported from their point of generation to a waste management facility;
- Waste tracking and reporting processes to provide transparency in waste management operations;
- Waste management oversight activities and an exit strategy for waste management activities

The Waste Management and Disposal Plan should describe key roles and responsibilities within the response organization, including who will oversee and manage the proper administration of the waste management and disposal plan during oil recovery operations. The Spill Management Team (SMT) or an

OSRO may take the lead for waste management and disposal operations due to the size and complexity of the operation and amount waste streams generated, however the Unified Command will require visibility on the process in order to provide required approvals.

For large and complex oil spill incidents, including SONS, EPA representatives can provide subject matter expertise on all aspects of waste management. The Coast Guard FOSC and Unified Command should leverage EPA knowledge and experience to ensure appropriate federal, state, and local requirements for waste management are being followed during an incident. It is highly important to also include the EPA in waste management planning activities by the Area Committee.

During a major oil spill, the plan holder's SMT may collaborate with local OSROs to develop the incident specific Waste Management and Disposal Plan. Most OSROs have a comprehensive Waste Disposal Plan that they rely on for normal operations, and much the information from these plans can directly inform operations. Much of the Waste Management and Disposal Plan details are driven by the type of product (e.g., heavy crude oil, light crude oil, etc.) spilled and the type of debris (e.g., environmental matter, cleanup materials, etc.) that may be mixed in with the oily waste streams.

Proper determination and classification of waste streams and proper disposal of waste that addresses RP liability, federal and state regulatory requirements, and cost are the core components of any successful waste management operation. The SMT and OSROs must understand any RP guidelines for product handling, treatment, and disposal; this ensures that the waste streams are handled properly and protects the RP from a liability standpoint.

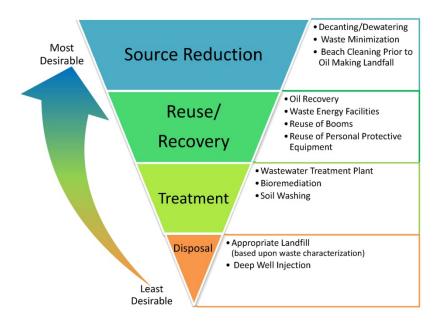
In cases where there is no RP or the RP is unwilling or cannot otherwise implement their waste management and disposal plan, it is critical for the FOSC and Area Committee to have the ability and requisite knowledge to work with the local OSRO community to develop and implement an effective Waste Management and Disposal Plan.

Oil response activities generate waste products contaminated with oil or other hazardous substances. It is important to recognize that contaminated soils, dredge spoils, drums, tanks, refuse, water and other associated materials are to be considered hazardous wastes and must be disposed of as such in accordance with the Resource Conservation and Recovery Act (RCRA), as well as local and state regulations managing the disposal of hazardous wastes. RCRA requires that any generator of a solid waste, as defined in 40 CFR § 261.2, must make a waste determination (i.e., determine if the waste is hazardous or not) and then manage the waste accordingly (40 CFR § 262.11). Generators may use either waste sampling or process knowledge to determine whether the waste is hazardous under RCRA. Many actions employed by the response organization will in fact create a situation in which the OSC will legally assume the responsibility as a generator of hazardous wastes. These wastes then become subject to the "cradle to the grave" manifesting procedures currently in effect under the governing RCRA regulations. As a result, the OSC must ensure that the hazardous waste generated from his/her removal actions be transported by an approved hazardous waste hauler to an approved

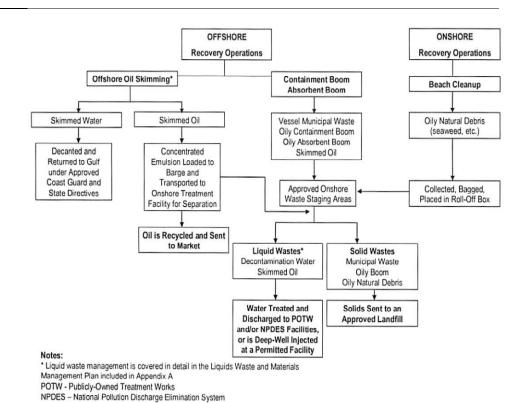
hazardous waste facility. Because this regulated process is complex, the response organization should try to minimize the generation of hazardous waste, and when that is not possible, consider employing on-site treatment (e.g., incineration, biological treatments, chemical treatments, waste stream treatment methods, etc.) since approved and effective on-site treatment will often eliminate the need to haul hazardous waste to a hazardous waste facility.

Under certain circumstances, such as a large incident that produces very high volume solid and liquid waste streams, some of the procedural requirements of the RCRA regulations can be waived. Those specific circumstances are described in the RCRA regulations (40 CFR Part 260).

A hierarchy common to all waste management operations is that source reduction is the preferred option, followed by reuse or recovery and treatment, with disposal being the least desirable and often the most expensive option. Applying this hierarchy to a SONS response would commonly result in these best waste management practices (see figure below):



Planners can use these best waste management practices to develop a strategy for waste management activities. They may develop a waste and material handling flow diagram to identify a "cradle to grave" process flow of waste management activities to include where waste will be generated, what waste will be generated, how much will be generated, the rate of waste generation, and the physical state (solid, liquid, gas) of the waste. It may also reflect the proper waste characterization and management approaches that meet all applicable government requirements. The figure below represents a high level process flow of materials management. A flow diagram like this enables waste management decisions based upon an understanding of the incident, the release, and the overall response strategies.



B. Elements

The key elements of Section 32XX.X are:

- Characterization and Sampling of Waste Streams
- On-site Waste Management (Sorting & Classification)
- Transportation and Tracking
- Processing, Recycling and Disposal

32XX.1 Characterization & Sampling of Waste Streams

Introduction The following table lists typical waste materials that may be generated during an oil spill response.

WASTE TYPE	WASTE DESCRIPTION
Oily Solids	Oil-contaminated material that may include debris, soil, sand, boom, and vegetation; weathered oil (e.g., tar balls); oily personal protective equipment (PPE); disposal equipment; sorbents
Non-oily Solids	Non-oiled material that has been recovered from support operations of the cleanup activities, including office trash, non-oiled beach debris, general garbage, non-oiled vegetation
Medical Waste	Sharps, syringes, PPE, & other medical-related material generated from operations at wildlife rehabilitation centers or command centers
Oily Liquids	Oil and water mixtures or emulsions (e.g., from skimming or oil recovery operations)
Liquids	Primarily water that may have an oily sheen or contain minor amounts of free oil droplets (e.g., onshore decanted water, storm water, decontamination water, treated water)
Recyclable/ Recoverable Materials	Plastic bottles, hard boom, aluminum cans, scrap metal, glass, cardboard, soft absorbent boom
Incident/field-related Laboratory Waste	Incident-related wastes generated by decontamination of the sample collection equipment and analysis of samples at on-site incident-related laboratories, including designated research vessels
Hazardous Waste	Non-exempt oil and gas production wastes that are listed hazardous wastes or exhibit hazardous waste characteristics
Animal Carcasses	Animal carcasses identified during shoreline cleanup or generated from operations at the wildlife rehabilitation centers
Laboratory Analysis Waste	Analytical sample wastes generated from the analyses of samples at fixed analytical laboratories

Early on, the RP should develop a waste analysis profile; this may include testing and analysis of oily waste so characterization is done properly. At the most basic level, characterization will differentiate between solid and liquid oily waste produced during response operations.

Standard sampling and analysis methodologies, as shown in the table below, include frequencies of sampling and data reporting of each of the anticipated waste streams. This information should be identified in a Waste Sampling and Analysis Plan as part of the overall Waste Management Plan. This will allow responders to determine the characteristics of the waste and identify appropriate receiving waste management facilities. This is important because waste management

facilities are permitted with facility-specific waste acceptance criteria¹ and waste generators may be required to complete facility-specific waste profiles before the waste management facility can accept the waste. Sampling and analysis of waste streams also provide additional information to guide Health and Safety plans for response workers, waste management facility operators and waste haulers. As the response unfolds, it may be appropriate to amend the Sampling and Analysis Plan to reflect potential changes in waste streams.

Matrix	Description	Sampling Frequency	Analysis	Handling	Disposal
Solid	Oil-impacted material that may include debris, soil, sand, vegetation; solid weathered oil (e.g., tar balls); PPE; disposal equipment; sorbents; etc. Material shall be drained of recoverable oil, as practicable (oil shall be collected for potential reprocessing or other use).	Once per week	TCLP SW 846 1311/ VOCs by SW 846 8260C TCLP SW 846 1311/ SVOCs by SW 846 827070D TCLP SW 846 1311/ Metals by SW 846 6010C & SW846 7471A Paint Filter Test SW846 Method 9095	Appropriate containers (i.e., lined or sealed) transported by approved waste hauler	Approved disposal facility
	Non-Oily solids that may include municipal waste material that has been recovered from support operations of the cleanup activities. Including trash and garbage.	None required	None	Containers transported by approved waste hauler	Approved disposal facility
Liquid	Water, oil and emulsion collected during skimming operations, by vacuum truck from decontamination facilities, management of storm water at land-based decontamination sites, etc. This category also includes excess decontamination water that accumulates during the closed loop decontamination process.	As needed basis based on final disposition of liquid	TCLP SW 846 1311/ VOCs by SW 846 8260C TCLP SW 846 1311/ SVOCs by SW 846 827070D TCLP SW 846 1311/ Metals by SW 846 6010C & SW846 7471A Ignitability by SW846 Chapter 7	Appropriate container (e.g., vacuum truck) transported by approved waste hauler. Storage in frac tanks at staging area prior to transport. Barge transportation and storage.	Approved recovery/ disposal facility

Below are the actions to be taken to characterize the oily wastes generated by a WCD. This section should describe the expected or typical wastes generated from spill response, how these are classified, tests or procedures to be used to classify and segregate wastes, packaging and labeling (where and if appropriate).

STEP	ACTION	✓
1.	Describe how the response organization will properly sample, determine, and classify the appropriate waste streams generated during the response.	

	This includes determining which waste streams are subject to the requirements of the Resource Conservation and Recovery Act (RCRA), and implementing regulations at 40CFR261, as well as any applicable state regulations.	
2.	Determine the need to conduct additional sampling outside of the required analysis. Laboratory analyses of oil samples may be required by the FOSC or RP for the following reasons:	
	 to identify "responsible party" for liability purposes; 	
	to compare the spilled oil with a potential source of pollution;	
	• to characterize the oil spilled in case of unknown source of spilled oil;	
	 to characterize oily waste mixtures collected during response to choose treatment options. 	

32XX.2 On-site Waste Management (Sorting and Classification)

Introduction

Below are the actions to be taken to describe the procedures for handling and sorting oily liquids, oily non-biodegradable solids (e.g., oiled plastics, contaminated clean-up equipment, etc.), oily biodegradable solids (e.g., oiled seaweed, etc.) and animal carcasses (both oiled and unoiled).

STEP	ACTION	✓
1.	Describe how the response organization sorts and classifies both solid and liquid waste streams on-site in preparation for transportation and disposal. Segregating the waste at the source or nearby allows the response organization to choose the most specific and best suited methods for each type of waste, ensuring cost effective and ecologically sound treatment. This section should clearly define the different categories of oil debris, including environmental and cleanup debris. Contaminated or incorrectly sorted waste streams can result in operational delays and unnecessary additional costs for the RP.	
	Note: Solid waste requires careful selection & sorting of oily waste and other debris materials; the methodology must be clearly articulated in Waste Management Plan. Handling procedures & packaging are important considerations that should be addressed during this process.	
	Note: Regardless of how liquids are recovered, they are often pumped directly into vacuum trucks or frac tanks until they can be classified by oil/water ratio or other method. Most liquid oily wastes are transported directly to an approved centralized waste treatment facility for processing and disposal. In some cases, the RP may require liquid waste streams (especially those that are high in oil content) to be returned to its own storage facility or vessel.	
2.	Describe the roles and responsibilities for carrying out these tasks during a response operation.	

<u>Note</u>: Whoever conducts this activity (e.g., SMT, OSRO, or subcontractor) must have substantial knowledge of waste streams identified during the characterization process. A generator certification must be created for each waste stream that describes the product and materials, and whether there is hazardous material that is part of the waste stream.

Note: Waste minimization must be a permanent objective during the clean-up operations and on-site handling of waste streams to reduce costs and protect the environment. Emphasis should be put on methodical management of clean-up sites to avoid spreading and secondary contamination of unaffected sites and also by choosing the recycling options for the oiled equipment. A thorough discussion of ways to minimize the generation of waste (e.g., minimizing the volume of sediments collected) should be discussed in Section 32XX (Waste Management and Disposal Contingency Planning) of the ACP.

32XX.3 Transportation and Tracking

Introduction

Any significant oil spill response involves the generation of large volumes of waste, often exceeding what waste management facilities handle in the course of an entire year or years of operation. In addition, this waste may be managed over a very large geographic area, involving many state and local governments, as well as a large number of waste management facilities. In order to assure the public, the media, and federal, state, local and tribal officials that the waste is being managed appropriately, it may be important to demonstrate that a cradle to grave waste tracking and reporting system is in place. The importance of this capability was highlighted during the Deepwater Horizon (DWH) Oil Spill of 2010, where BP was required to track and report waste and other recovered materials to inform the public, regulators, and the media about the status of waste management activities. This calls for careful planning to identify who is responsible for keeping the tracking system updated with accurate information, establishing data management and data quality control methods to ensure the accuracy of the reporting, and verifying that this system will provide the IC the information necessary to effectively oversee the waste management activities associated with a major oil spill.

Below are the actions to be taken to develop a material management tracking and reporting plan, identify licensed transportation companies and their capabilities/limitations to carry waste from the primary oil spill response storage site(s) to intermediate and/or long-term storage or treatment and disposal facilities.

STEP	ACTION	✓
1.	Describe how waste streams are transported and tracked after sorted, classified, and prepared for transport. A material management tracking and reporting plan may include the following:	
	Reporting of waste sampling and analysis results by location;	

- Uniform tracking of waste and other materials, covering recovered product, and liquid and solid wastes;
- Tracking the quantity and volume handled at each waste management location, including where waste is temporarily (e.g., staging areas) or permanently (e.g., disposal site, recovery operation) located;
- Reporting on the status of waste management activities on a daily and cumulative basis for each type of material;
- Online web posting showing how and where each category of waste is being managed, and the quantities accepted at each location; and
- Archived posting of the Incident Command System (ICS) reports (e.g., ICS 209, "Oil Spill Incident Status Summary").

<u>Note</u>: The RP must meet federal and state requirements for transport of hazardous waste. Many states will often require either a hazardous waste manifest (MA) or a non-hazardous waste manifest (FL). In addition, trucks & drivers may need special permits for carrying certain types of waste streams while en route to the appropriate disposal location.

<u>Note</u>: Agreements with potential transport providers should be made in advance of a major oil spill.

32XX.4 Processing & Disposal

Introduction	Below are the actions to be taken to ensure that the solid and liquid oily
	wasted generated by response operations are properly treated, stored, and
	disposed of.

STEP	ACTION	✓
1.	Describe the procedures that detail how the different types of waste streams will be properly treated, stored, and disposed of during response operations. Include a list of all EPA and/or state permitted treatment, storage and disposal facilities (TSDFs) within the local Area, as well as adjacent Areas.	
	Note: The final disposition of the oily solid and liquid wastes is the responsibility of the RP. The RP may have guidelines for method of processing, product treatment, and disposal technologies that should be incorporated into this process.	
2.	Describe what organizations are permitted and qualified to manage these phases of the waste disposal process.	
	Note: The SMT, OSROs, or whoever has been contracted to handle the waste materials will be interested in the most cost effective means of disposal that meets their client's (RP) requirements. OSROs that do not maintain hazardous waste generator and transporter permits may simply turn over all recovered product to the RP for their disposition. Those OSROs that do maintain the required permits typically sub-contract with EPA or state permitted treatment, storage and disposal facilities (TSDFs).	

Note: SMTs and OSROs have tremendous local knowledge that should be leveraged in finding the most appropriate and certified waste disposal facilities; many OSROs have relationships w/ disposal facilities and may have multiple options for waste treatment in the local Area. Each disposal facility has a Waste Analysis Plan that describes what type of waste they are certified to handle according to State regulations; this certifies the facility for only certain types of waste.

C. Examples

Enclosure (1), Sample Waste Management & Disposal Plan, is a good example of a waste management & disposal plan that would be developed for a major oil spill scenario (such as DWH). An incident-specific plan like this example can be quickly developed based on the information found in this section. Furthermore, the FOSC should reference any facility, vessel, or OSRO plans which may contain important waste management procedures for the local Area.

Please note, additional appendices that include more details on hazardous material transporters, staging areas, and disposal facilities would be necessary to supplement this plan during an incident This example contains the following key elements described in Section 32XX.X:

- Characterization and Sampling of Waste Streams
- On-site Waste Management (Sorting & Classification)
- Transportation and Tracking
- Processing, Recycling and Disposal

D. References

This section describes some valuable waste management tools and resources that are important to be aware of before a SONS. These tools and resources have been developed to assist emergency managers and planners, as well as Incident Commanders and waste management officials, during the waste management decision making process involved in a SONS response. Many of these resources and tools have been developed or updated to address gaps in capabilities identified by stakeholders in the emergency response community and are frequently updated. A short description and additional information on each is presented:

Waste management and disposal decisions: U.S. EPA's National Homeland Security Research Center developed the "Incident Waste Assessment System and Tonnage Estimator" (I-WASTE) to assist individuals responsible for making decisions associated with handling, transport, treatment, and disposal of wastes from different incidents. The I-WASTE is location-specific to help identify specific facilities and contacts for disposal. The I-WASTE provides quick reference to technical information, regulations, and other information to provide decision makers with assistance in guiding waste management decisions that are important for the protection of public health, first responders, and the environment. Access to the I-WASTE can be requested through the sign on page at: http://www2.ergweb.com/bdrtool/login.asp.

Waste management information: U.S. EPA's Office of Resource Conservation and Recovery maintains the website for "Waste Management from Homeland Security Incidents," found at http://epa.gov/waste/homeland/. Homeland security incidents include incidents requiring a national response (e.g., SONS); acts of terrorism perpetrated with, for example, radiological

dispersal devices or chemical or biological warfare agents; large-scale natural disasters, such as Hurricane Katrina; and animal disease outbreaks. This site provides waste management information that can be used by emergency planners, managers, and responders in planning before a homeland security incident occurs, and in decision-making during and after an incident occurs. Tracking: DrumTrak is a software tool designed to assist in the process of drum and container management. It captures physical drum data (drum type, closure, layers, location, markings, etc.). In addition, DrumTrak processes analytical results to determine hazardous characteristics and assists users in creating bulk groups for disposal.

http://www.ertsupport.org/DrumTrak Home.htm

<u>Transportation options:</u> U.S. DOT hosts a Hazardous Materials Information Center (HMIC) which can be reached at 1-800-467-4922. The HMIC can provide help on use of the DOT's Hazardous Materials Regulations 49 CFR Parts 100-185. The specific regulations pertaining to packaging, shipping, and transport of hazardous materials can be found in 49 CFR Parts 171-180. http://www.phmsa.dot.gov/hazmat/info-center

Hazardous waste treatment, storage, and disposal facilities regulations: This web-based document serves as a user-friendly reference in locating and understanding the current RCRA hazardous waste treatment, storage, and disposal facility (TSDF) regulations. The information is organized by the type of hazardous waste management activity, which encompasses hazardous waste treatment, storage, and disposal, and includes information on containers, incinerators, landfills, land treatment, surface impoundments, tank systems, and waste piles. This reference can be an important resource in developing a waste management plan for hazardous waste streams. A copy of this document can be found at:

http://www.epa.gov/epawaste/hazard/tsd/permit/tsd-regs/tsdf-ref-doc.pdf

Unified Area Command Plan Deepwater Horizon MC252 Gulf-Wide Recovered Oil/Waste Management Plan

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Appendix J Recycling Strategy

1 INTRODUCTION

The purpose of this plan is to describe oil recovery and waste management activities related to the Mississippi Canyon Block 252 (MC 252) Deepwater Horizon incident. Waste generation activities include: oil skimming and collection, shoreline clean-ups, decontamination of cleanup equipment, shoreline remediation, wildlife rehabilitation, as well as other activities related to oil spill cleanup. These activities will be managed under this Recovered Oil/Solid Waste Management Plan (hereafter referred to as the SWMP); as well as oil recovery/reclamation and recycling/reuse/recovery operations. This plan is intended to cover common gulf-wide waste activities recognizing there are also state-specific waste management requirements. Therefore, when following this plan it will be necessary to check the Appendices E through I for additional state requirements.

1.1 Background and Plan Scope

This plan is written at the request of the Incident Commander, the U.S. Coast Guard (USCG) Federal On-Scene Coordinator (FOSC), and the associated State On-Scene Coordinator (SOSC) for Mississippi, Alabama, Florida, Louisiana and Texas.

This SWMP outlines the waste management procedures and expectations to support proper waste classification, handling, staging, storage, manifesting, transportation, disposal/recycling of the waste generated from spill cleanup activities, and potential reuse/recycling opportunities. This SWMP will be implemented in accordance with applicable local, state and federal directives, laws and regulations.

This SWMP is intended to be flexible and will be amended as necessary in response to changing needs of MC252 oil spill cleanup response activities. Additional or revised information regarding site-specific waste management activities, procedures, and locations may be provided as revisions to this SWMP to accommodate these needs. Amendments to this plan may occur only upon mutual agreement by BP and the appropriate federal and/or state agencies. The U.S Coast Guard FOSC is the authority to approve changes to the plan. Information that may be amended potentially includes additional management activities, waste staging locations, disposal and/or recycling facilities.

1.2 Waste Management Strategy

Spill cleanup operations may occur along the shorelines and within the Gulf of Mexico. The waste streams generated during cleanup activities will be collected and routed to predetermined staging areas that have been approved by the Gulf Coast IMT and applicable federal and state regulatory agencies. From the staging areas the waste will be manifested and transported for final disposition to an approved disposal, treatment or recycling facility. Figure 1.1 provides an overview of how cleanup materials and waste flows from onshore and offshore recovery operations to final disposition.

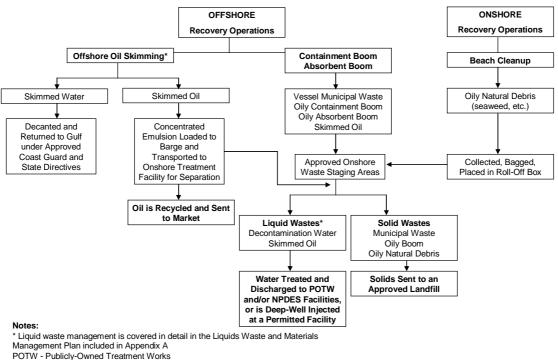


Figure 1.1 Waste and Material Handling Flow Diagram

POTW - Publicly-Owned Treatment Works

NPDES - National Pollution Discharge Elimination System

The following preferred hierarchy of waste and material management will be used, as applicable, during implementation of this SWMP:

Source Reduction Reuse/Recycling/Recovery Treatment Disposal

Examples Decanting, waste minimization Use of oil recovery and waste energy facilities Wastewater treatment plant Approved disposal at landfills

The primary goal of this SWMP is to develop a process for managing wastes so as to assist field operations to efficiently collect, contain and remove contaminated materials from affected areas. As a result, volumes generated and operational logistics may not allow for some management options (e.g., reuse/recycling) to be implemented.

However, certain materials collected and/or generated as a result of the cleanup may have recovery (e.g., energy recovery) or recycling value. Recovery, reuse or recycling of contaminated and non-contaminated materials will be evaluated and implemented as applicable and practical.

The protocols and waste management operations plans for proper waste handling, staging, tracking, transporting, and final disposition are described in this document as well as the attached Appendixes. The deliverables that were generated in response to the June 29,

2010 Recovered Oil, Contaminated Materials, and Liquid and Solid Wastes Management Directives are as follows:

- Liquid Waste and Materials Management Plan;
- Waste Sampling Plan and Quality Assurance Project Plan;
- Waste and Material Tracking System/Reporting Plan; and
- Community Outreach Plan in support of Waste Management

and are included in the Appendices A through D.

2 MATERIAL / WASTE STREAM IDENTIFICATION & CHARACTERIZATION

2.1 General Materials and Waste Streams

The typical material and waste streams generated by oil spill cleanup activities are described in Table 2.1-1. Estimated generation volume of each reclaimable/recyclable material, recovered oil or cleanup waste type is unknown and will depend on the extent of oil spill impact areas, containment and collection/cleanup operations. Classification of the recyclable/recoverable and waste streams will be determined based on generator knowledge and sampling analysis results. Wastes will be characterized in accordance with analytical and timeframe requirements of the facilities selected for recycling (primarily oil) or waste disposal, as defined in the facility's permit requirements, and in accordance with applicable federal and state regulations.

Resource Conservation and Recovery Act (RCRA) regulations encourage recovery and recycling of oil from cleanup activities by excluding oily solids and liquids that are destined for oil recovery and reuse as product from the definition of solid waste (see 40 Code of Federal Regulations (CFR) Part 261).

In cases where oil contaminated wastes from cleanup activities will be disposed, federal and state regulations exempt most of those wastes from the definition of hazardous waste due to the RCRA exploration and production (E&P) exemption (see 40 CFR 261.4(b)(5)). E&P wastes will be managed in accordance with appropriate state and federal regulations.

Solid wastes that are not recycled and not subject to the E&P exemption will be characterized in accordance with RCRA (see 40 CFR 262.11) and applicable state requirements. Individual state requirements for waste characterization are noted in the attached appendices, as applicable.

Table 2.1-1: General Materials and Waste Streams

Waste Type	Description and Examples	Staging	Disposal
Oily Solids	Oil-contaminated material that may include debris, soil, sand, boom and vegetation; solid weathered oil (e.g., tar balls); oily personal protective equipment (PPE); disposal equipment; sorbents;	Approved staging areas	Appropriate recycling or disposal facility
Non-oily Solids	Non-oiled material that has been recovered from support operations of the cleanup activities, including office trash, non-oiled beach debris, general garbage, non-oiled vegetation	Approved staging areas	Approved disposal facility
Medical Waste	Sharps, syringes, PPE, and other medical-related material generated from operations at wildlife rehabilitation centers or command centers.	Approved staging areas	Approved disposal facility
Oily Liquids	Oil and water mixtures or emulsions (e.g., from skimming or oil recovery operations). Liquids and oily liquids will be managed as described in Liquid Waste and Materials Management Plan included in Appendix A.	Approved staging areas	Appropriate recycling or disposal facility
Liquids	Primarily water that may have an oily sheen or contain minor amounts of free oil droplets (e.g., onshore decanted water, storm water,	Approved staging areas	Appropriate recycling or disposal facility

	decontamination water, treated water)		
Recyclable/ Recoverable Materials	Plastic bottles, hard boom, aluminum cans, scrap metal, glass, cardboard, soft absorbent boom	Approved staging areas	Appropriate recycling/recov erable facility
Incident/field-related Laboratory Waste	Wastes generated by on-site incident-related laboratories, including designated research vessels	Approved onshore staging areas	Approved disposal facility
Hazardous Waste	Non-E&P wastes that are listed hazardous wastes or exhibit hazardous waste characteristics.	Approved staging areas	Approved disposal facility
Animal Carcass	Animal carcasses identified during shoreline cleanup and/or generated from operations at the wildlife rehabilitation centers.	United States Fi Service (USFWS fish and wildlife responsible for of transporting and animal carcasse) and/or state agencies will be ollecting, disposing of
Laboratory Analysis Waste	Analytical samples wastes generated from the analyses of samples at fixed analytical laboratories	Laboratories will disposal of their generated at the	own lab wastes

Materials and wastes will be managed appropriately from the point of generation until the final disposal of the wastes or recycle/reuse of the materials. Table 2.1-2 below presents the general management of the significant spill cleanup waste streams from point of generation through the final disposition (e.g., waste/material management flow).

Table 2.1-2: Waste/Material Management Flow

Generation Location or Retrieval Activity	Waste/Material Type	Verification / Manifesting	Transport	Quantity and Quality?	Disposition
Operations Staging Areas	Solid Wastes	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Roll-off bax	Generally not sufficient quantity of uniform majerial to be considered for recycling	Approved landfill
Vessels of Opportunity Deployment Locations	Solid Wastes Oily Solids	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Roll-off bax	Generally not sufficient quantity of uniform material to be considered for recycling	Approved landfill
On-Shore Decontamination Stations	Solid Wastes Oily Solids	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Roll-off bax (solids)	Generally not sufficient quantity of uniform material to be considered for recycling	Approved landfill (solids)
	Liquids Oily Liquids	and mannesung	Vacuum truck (liquids)		Approved recycling, treatment, or disposal facility (liquids); water is separated, treated and discharged via POTW.
Shore-line Cleanup Operations	Solid Wastes Oily Solids	On-site consolidation and manifesting, or transfer to waste staging area for further consolidation and manifesting	Roll-off bax	Olly solids that are uniform and have sufficient quantity of oil for recovery are sent for recycling	Approved landfill (solids); oily solids may segregated for potential future recovery efforts
Skimming Operations	Oily Solids Liquids Oily Liquids	On-sile consolidation, transfer to waste staging area for further consolidation and manifesting	Barge or vessel	Materials that are uniform and have sufficient quantity of oil for recovery are sent for recycling	Approved landfill (solids) Approved recycling facility; oily solids (e.g., sorbent boom) may be centrifuged and separated oil sent for recycling Approved recycling, treatment, or disposal facility (liquids); water is separated, treated and discharged via POTW.

2.2 Material and Waste Sampling and Analysis

Once identified, waste streams are sampled to determine their characteristics and classifications for use by receiving facilities to verify the material meets facility-specific acceptance criteria, and to complete facility-specific waste profiles. Sampling and analysis will also provide additional information to response workers and the public regarding the chemical and physical properties of materials that are generated and managed during oil spill cleanup activities. Details related to methodologies, frequencies, posting requirements, etc. of waste streams are detailed in the Waste Sampling Plan included in Appendix B. In addition, Appendix B includes the Quality Assurance Project Plan, labeled Appendix B-1.

3 WASTE AND MATERIALS MANAGEMENT APPROACH

Waste management contractors, currently Waste Management Inc. (WMI) in Alabama, Mississippi, and Florida as well as Heritage Environmental Services (HES) in Louisiana, are contracted to manage the waste process including:

- Providing labor, materials, and equipment to contain and transport the waste;
- · Segregating, and staging wastes;
- Obtaining profiles at approved disposal facilities;
- Obtaining data and determining waste classifications;
- · Completing waste transportation manifests or bills of lading;
- Signing waste manifests, under authorization and designated signature authority,
- Completing waste tracking documents, including type and volume of waste generated and disposed.

3.1 Guidelines for Managing Wastes Streams

In general, materials generated from oil spill cleanup activities will be handled as follows:

Waste Minimization and Material Management

- Field crews collecting material should use screening and sorting techniques to minimize the amount of sand collected with oiled material and/or tar balls.
- When possible, reusable containers should be used to collect heavily oiled material (i.e. Tar balls) during clean-up operations instead of plastic bags as they are a hindrance to reuse, recycling or biological remediation options

Material/Waste Accumulation

- Only clean-up contractors that are specifically contracted for this incident shall be allowed to bring waste to the staging areas. If others attempt to deposit non-spill related waste at the staging areas they shall be immediately turned away by security personnel.
- Containers containing waste or recyclable materials should only be stored at approved staging sites
- Liquids, such as oily water, decontamination water and stormwater, should be transported by vacuum tanks and staged in frac tanks.
- Prior to storage of solid materials, containers should be lined and absorbent materials will be put along seams, if needed. Roll-off containers containing waste or recyclable material should be covered (tarped) when not actively being loaded and during transportation.
- Upon receipt of a container at a staging area, the containerized waste or material should be identified as waste to be routed for disposal or material to be routed for recycling/reuse/recovery. The material's classification will be based on process/generator knowledge or previously completed waste profiles.

Material/Waste Management

 Partially-filled and filled containers should be labeled and routinely inspected to assess their condition.

- In the event a leak is observed, the following should take place:
 - Source of leak should be determined and corrected utilizing a visual inspection.
 - Utilize standard spill cleanup materials and equipment (i.e. shovel and absorbents).
 - Any remaining impacted soil should be excavated, containerized and properly disposed.
- If required by applicable regulations, frac tanks and roll-off containers should have spill containment. If 55-gallon containers are used, they will be U.S. Department of Transportation (DOT) approved and have secondary containment, if required.
- Spill Control and Countermeasures Plans (SPCC) are prepared or under development for those sites subject to 40 CFR 112.1 and equivalent state requirements.
- Containers with oil residue on the exterior should be manually cleaned or transferred to a decontamination station for cleaning.

Manifesting and Transportation

- Once a container is considered full, the container should be properly covered and labeled for transportation. Transportation should be arranged by the waste management company. Shipping documents should be prepared and signed by authorized designees. Where applicable, storage time of roll-off containers (when full) will not exceed 45 days, and should be removed as quickly as practical.
- A manifest or bill of lading and relevant paperwork should be prepared and reviewed for completeness prior to transportation. The manifest or bill of lading should be signed by BP as generator of the waste or an authorized BP agent. BP has authorized HES and Environmental Resources Management (ERM) representatives to sign manifests on behalf of BP (see Appendices E through H for Waste Manifest Signature Delegation Authority agreements).
- Following manifest or bill of lading activities, properly credentialed driver should be assigned to transport the load and provided with completed paper work.

3.2 Staging Areas

Staging areas have been identified to support the cleanup operations associated with this incident. The areas are divided by function and include equipment staging, waste staging, and decontamination work areas. The typical work force staffing for a staging area should include the following staff:

- Staging Site Manager;
- Waste Management Contactor staff
- Safety Representative;
- Security Personnel, staging areas will have 24-hour, 7 day a week security personnel; and
- Other personnel as needed based on the site specific activities.

Additional staging, decontamination stations and disposal/recycling sites may need to be added or closed due to changes in response activities. Lists of approved staging locations that are currently operational or may be soon are provided by state in Appendices E through I.

Permits and approvals that are required to site and operate temporary staging and decon station areas that support response operations will be followed.

Hydrogen Sulfide (H2S), poses a risk to personnel when found at high concentrations. The primary concern is the potential presence of H2S in some of the roll-off containers related to the MC252 Spill Response. Over time materials, when left in a closed container, can generate quantifiable levels of H2S.

The current levels of exposure for H2S that are permitted are no greater than 20 parts per million (ppm) ceiling limit for a normal work period with the following exception, if no other measurable exposure occurs during the normal work day, exposure may exceed 20 ppm but may not exceed 50 ppm for a single time period of greater than 10 minutes. In consultation with the site Health and Safety Specialist, a review of the waste staging area should be conducted to provide a determination as to H2S levels, and what steps should be followed if any, which could include: _

- 1) Containers to be vented 30 minutes prior to shipping to decrease the likelihood of transport truck driver or landfill employee exposure when the containers are emptied.
- 2) If determined that there is a need, roll-off containers will be screened to determine if H2S readings are at or above prescribed limits.
- 3) If elevated concentrations are identified during the screening H2S personal monitors will be used by the drivers and workers in the waste staging area

At the conclusion of use, staging areas will be closed following local and state requirements. The specifics of this program will be developed separate from this SWMP.

3.3 Tracking/Reporting

A data management system will be used to track waste characterization documentation, waste profiles, waste manifests, and bills of lading. Waste that is handled at each waste staging area is tracked daily by individual state and waste staging area location, and the information is used to provide updates to the daily ICS-209 Form. Recyclables/recoverables are also tracked and documented. Waste and material tracking information is regularly reported on BP's website. A detailed description of the Tracking System/Reporting Plan is included in Appendix C.

3.4 Final Disposition of Wastes

Only licensed or permitted waste management and disposal, or recycling facilities (with the exception of recycling facilities for common items such as plastic water bottles, aluminum cans, cardboard, etc) that are listed in the state-specific appendices of this SWMP will be used. Special arrangements and the necessary approvals will be obtained for county or municipal disposal facilities (as identified by local and state officials) prior to use, as required.

4 HEALTH AND SAFETY

Health and safety considerations will be covered under separately developed Site-specific Safety Plans. These plans will be available onsite for staff and visitors to review.

5 COMMUNITY RELATIONS

Community relations are vital to properly manage any community issues or concerns that arise in connection with handling oil spill cleanup-related wastes associated with MC 252 incident. With this in mind, a Community Outreach (CO) Program has been developed to engage local communities. A *Community Outreach Plan in support of Waste Management*, was developed is response to the June 29, 2010 waste deliverables and is included in Appendix D.

To the extent feasible, impacts on minority and low income populations will be reviewed when selecting future staging areas and disposal options. The Gulf Coast IMT has a commitment to address environmental justice challenges and the disproportionate environmental burdens placed on low-income and minority communities as directed by applicable legal requirements. The Gulf Coast IMT will strive to minimize the impacts of waste management logistics and operations on communities near those operations. Planning may include the following based on information provided by the US Environmental Protection Agency (EPA):

- Analysis of socio-economic demographic data within close proximity to operations;
- Evaluation of any potential impacts on sensitive populations; and,
- Evaluation of any pre-existing community concerns and regulatory enforcement history.