Annex U - Oil Spill Incident Annex

Introduction

Response to oil spills can vary greatly, involving only a few people or thousands. The initial action taken by responders sets the tone and direction of the response.

Purpose

The purpose of this Annex is to facilitate the rapid establishment of a multi-agency and responsible party incident command team to respond to an oil spill occurring in the coastal zone. This Annex should be used in conjunction with the Area Contingency Plan and, if the cause of the incident is a suspected or actual terrorist incident, used in conjunction with the Area Maritime Security Plan.

The guidance in this Annex includes:

- Unified Command Organization
- Unified Command Objectives
- Considerations of the Coast Guard Incident Commander/Unified Command
- Operations Section
- Operations Section Chief Responsibilities
    - Protection Group
    - Oil Recovery Group
    - Submerged Oil Group
    - Decontamination Group
    - Waterways Management Branch
        - Vessel Traffic Management Group
        - Vessel Decontamination Group
            - Cleanup Assessment Team Supervisor
            - Decontamination Taskforce
        - Survey Group
        - Safety Zone Group
    - Air Operations Branch Director
        - Aerial observation
- Planning Section
    - Environmental Unit Leader Responsibilities
        - Submerged Oil Assessment Team
        - Shoreline Cleanup Assessment Team
        - Wildlife Team
        - Sign Off Team
    - Facility and Vessel Decontamination Prioritization Unit
- Disposal Technical Specialist
- Natural Resource Trustee

- Historic Property Specialist
- Finance Section Chief
- Logistics Section Chief
- Special Teams

Unified Command Organization

The make-up of the Unified Command organization for an oil spill response is usually comprised of the Coast Guard, New York Department of Environmental Conservation, New Jersey Department of Environmental Protection and the Responsibility party. Figure 1 is an illustration of the agencies and/or entities that could serve in the Unified Command and General Staff. The list of agencies is not exclusive.

Figure 1. The generic incident command organization for an oil spill response.

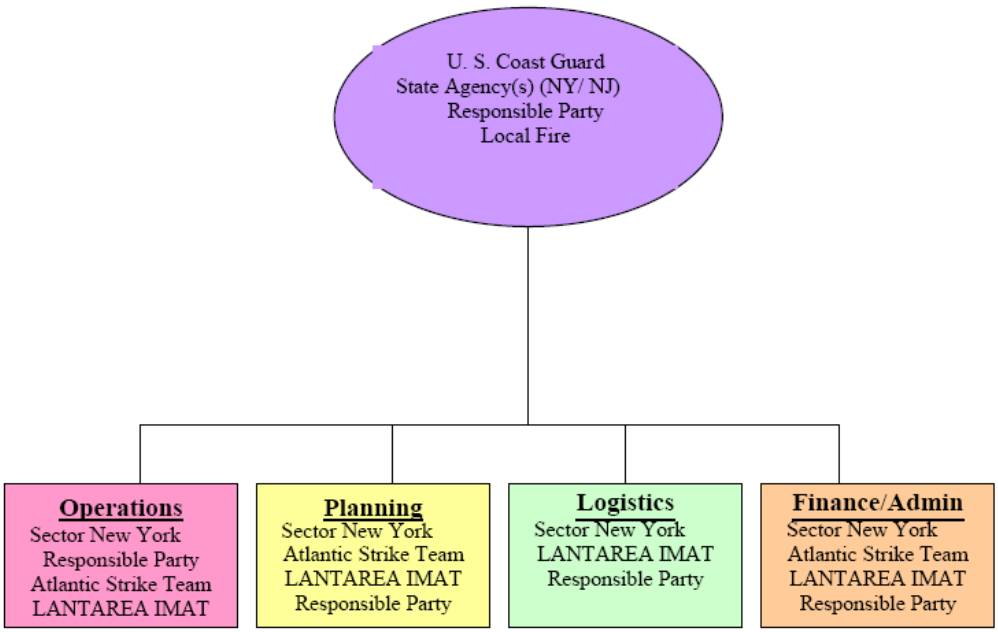

Figure 1. The generic incident command organization for an oil spill response.

Unified Command Objectives

- Safety is of paramount importance
    - All operations will be performed in accordance with approved safety plans
    - Establish and enforce safety zone(s)
    - Notify and protect water intakes
- Maximize protection of environmentally sensitive areas including wildlife and historic properties.
    - Ensure actions are underway to control the source and minimize the volume released
    - Assess the location and extent of oil impact
    - Deploy and monitor pre-identified booming strategies to protect sensitive areas
    - Ensure effective containment, cleanup, recovery, and disposal of spilled product
    - Determine if submerged oil is present and respond accordingly
- Facilitate Maritime Commerce
    - Return port to normal operations as soon as possible (ie: Salvage plans for vessels, pipeline repair plan, facility repair plan, etc.}
    - Facilitate vessel movement in the affected port area
    - Expedite the decontamination of commercial vessels
- Cleanup environment to the satisfaction of stakeholders
    - Conduct pre-impact beach clean-up
    - Conduct aggressive shoreline cleanup and disposal operations
    - Recover and rehabilitate injured wildlife

Considerations and Actions of the Coast Guard Incident Commander (CGIC)/Unified Command:

- Determining Safe to Respond
- Establishing a safety zone
- Under the Endangered Species Act
    - Notify the Regional Response Team representatives of the Department of Interior and Department of Commerce regardless of whether listed species or critical habitat
    - If listed species or critical habitat are present or could be present, initiate an emergency consultation with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS)
    - Document any written or oral communications that involve decisions on endangered species or critical habitat
    - Notify the USFWS and NMFS representative on the incident command team of any response situation changes that may impact endangered species or designated critical habitats

Ensure that response strategies and tactics are planned to minimize damage to endangered species and designated critical habitats
    - **Post response:** If listed species or critical habitats were adversely affected by oil spill response activities, a formal consultation is required
- Determining if historic properties will be potentially impacted by response activities
- Determining viability of employing countermeasures
    - Dispersants
    - In-situ burning
- Establishing consultation with the lead Federal Trustee and ensuring close coordination of trustee related activities

Operations Section

The Operations Section will be organized to meet the needs of the incident. For large and/or complex oil spill response operations the Operations Section Chief may organize as shown in Figure 2.

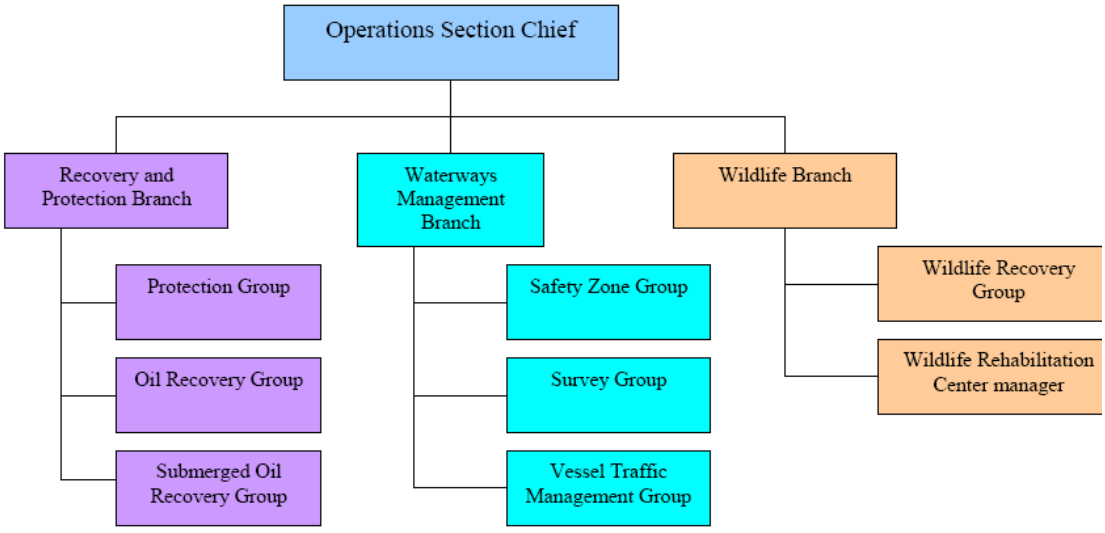

Figure 2. The size and makeup of the Operations Section is dependent on the size and complexity of incident. For a major oil spill the Operations organization may be organized as shown above.

Operations Section Chief

- Responsible for initial assessment:
    - Determine location and time of spill, product spilled and amount
    - Determine immediate safety hazards
    - Obtain best estimate of oil movement for next 12 hours based on current weather and tides
    - Identify areas that will be impacted
- Implement protective booming strategy
    - Prioritize protective booming (The Area Committee has determined that protecting openings to wetlands is the number one priority for protective booming. The philosophy is that oil can be deflected onto any river bank but must be prevented from going up tributaries into the wetlands.)
- Control the source
    - Ensure actions are being taken to control and secure the source
    - If necessary, recommend establishing a safety zone
    - Contain the spill in vicinity of the source
- As needed, establish response branches (Recovery and Protection, Emergency Response, Air Operations, Wildlife)
- Consider conducting pre-impact cleanup of shoreline
- Identify staging areas to be used
- As directed conduct dispersant operations
- As directed conduct In-situ Burn operations

Protection Group

- Activate Oil Spill Response Tools (ASAMAP)
    - Based on location of spill, amount released, weather and other factors determine what areas will be impacted and the time they will be impacted
    - Provide prioritized protective booming list to the Operations Section Chief or Branch Director, if established
- Determine the organizations responding from Responsible Party
- Issue Notice to Mariners for protective boom sites. Make adjustments to broadcast to ensure that the most up-to-date information is provided
- Ensure that boom sites are lighted and tended.
- Monitor and maintain the boom sites
- Based on overflight information
    - Determine additional sites that will have to be boomed and establish priorities
    - Identify other potential sites (other than openings to wetlands) that may require protective booming
    - Identify staging areas to mobilize
    - Identify resources to be mobilized (equipment and personnel)
    - Repeat above until no further protective booming is needed
- Determine protective boom sites that can be removed and order same

Oil Recovery Group

- Determine the number of Oil Spill Response Vessels (OSRVs) required and submit request to the Operations Section Chief. Take in account:
  - Those currently on-scene and those that have been ordered
- Obtain dedicated helicopter for on water recovery operations (the efficiency of the on water recovery will be severely impacted without air support)
- Establish communications with helicopter and/or on-water resources
- Obtain latest spill information to verify that the on-water resources are the best location to recover oil
- Determine the adequacy of the OSRVs deployed and look at other resources that might be available
- Look at methods to enhance the recovery operations
  - Look at the planned collection booming schemes in the ASAMAP data layer
  - Look at the possibility of using V-booms to enhance the encounter rates
- Determine the temporary storage required for the spill and type required:
- Monitor the location of on-water resources and, if direct air support is not available, provide the OSRVs with the latest observations from any sources and the latest trajectory information to assist in keeping the OSRVs in areas where there is recoverable oil

Submerged Oil Group

(established when submerged oil is determined to exist)

- Locate and quantify recoverable submerged oil with remote sensing and or contaminated water divers
- Develop appropriate site safety plan
- Identify required resources based on quantity, viscosity, water depth and temperature
- For large quantities of submerged oil consider:
  - Platform (vessel, barge, etc.)
  - Contaminated water divers
  - Pumping equipment
  - Oil/water separation, decanting
  - Temporary storage
  - Transfer equipment
  - Disposal needs
- Small quantities of submerged oil:
  - Weighted snare or VSORS (Vessel Submerged Oil Recovery System)
  - Diver assisted recovery with viscous oil pom poms

Decontamination Group

- Identify types and amounts of equipment to be decontaminated
  - Large vessels (ships and barges) on water

- Small vessels (recreational and response vessels associated with the incident)
- Oil Containment boom
- Skimmers

- Identify and locate suitable facility for decontamination activities
  - Suitably sized area for decontamination operation
  - Suitable area for staging equipment prior to and post decon
  - Consider location based on public use and access preferably industrial area
- Work with the Safety Officer to develop appropriate site safety plan considering approved cleaning agents (include information on the Material Safety Data Sheet)
- Identify and locate required resources
  - Decontamination pools
  - Pressure washers
  - Pumps
  - Water source
  - Wash water temporary storage
  - Wash water transport to disposal facility in accordance with waste disposal plan
  - Equipment handling (fork lift, crane)
- Develop appropriate tracking and documentation of equipment as it enters and departs decontamination facility

Waterways Management Branch

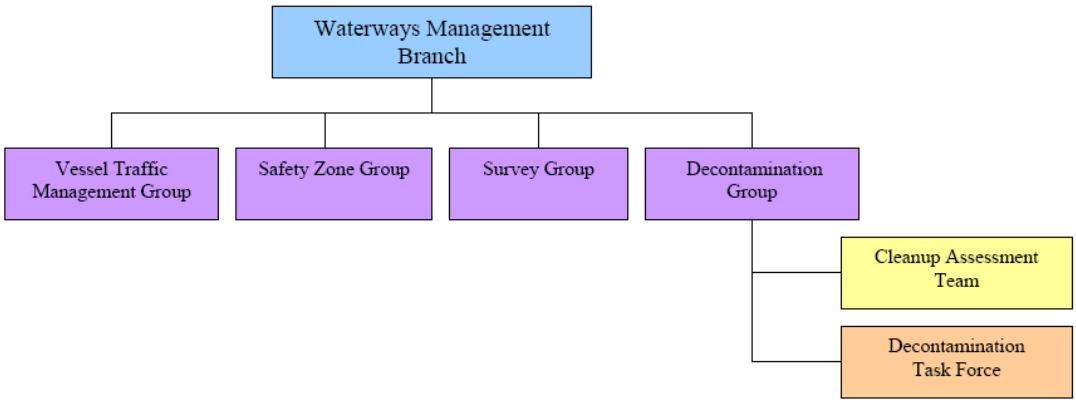

Figure 3. The Waterways Management Branch organization oversees the safe movement of vessels within the established safety zone.

The WMB ensures the safe movement of vessels within the established safety zone. Specific responsibilities include:

- Coordinating all vessel arrivals, departures and requests from vessels to shift berths
- Establish daily priority list of facilities and vessels identified for decontamination. Consult with:
  - The NY/NJ Area River Keepers
  - The Commercial Facility and Vessel Decontamination Priority Matrix developed by the Planning Section
- Document all Branch activities and decisions

Vessel Traffic Management Group (VTMG). Approves or disapproves vessel transits through the established safety zone. Specific responsibilities include:

- Approve or disapproves vessel movement based on the following criteria:
  - Location of oil spill
  - Tides
  - Berth availability
  - Vessel determined to be clean by the Decontamination Group
  - Facility piers determined to be clean by the Decontamination Group
  - Transit times

- Coordinate all vessel arrivals, departures, and request from vessels to shift berths [
  - Instructions for vessels requesting entry into the safety zone
  - Instructions for vessels requesting to shift within the safety zone
  - Instructions for vessels requesting to depart the safety zone
- Coordinate vessel movements with the Safety Zone Enforcement Group
- Provide the following information to the Situation Unit prior to the Unified Command Planning Meeting:
  - Number of vessels awaiting berth
  - Number of vessels authorized inbound transit through the safety zone
  - Number of vessels departed
  - Number of vessels awaiting decontamination
  - Number of vessels actively being decontaminated
  - Total number of vessels decontaminated
  - Number of vessels awaiting inspection
  - Total number of vessel inspections completed

Decontamination Group Supervisor. Oversees the implementation of the facility and vessel decontamination plan. Duties include:

- Verify the daily decontamination priority list
- Assign and coordinate decontamination work assignments
- Ensure that safety briefings are conducted prior to each shift
- Ensure that decontamination schedule is communicated daily to impacted stakeholders

Cleanup Assessment Teams. Conduct assessments of facilities and vessels within the spill area to determine extent of oil contamination and if decontamination efforts meet established criteria for cleanliness.

- Receive daily work assignment from the Decontamination Group
- Document (written and photographic) findings for each facility and vessel assessed
- Check integrity of deployed boom around facility piers. Notify Decontamination Group Supervisor if boom is not performing as required
- Check vessels within the safety zone for oiling. Notify Decontamination Group Supervisor of vessel(s) status (contaminated or not contaminated)

Decontamination Task Force. Provide personnel and equipment to conduct commercial facility and vessel decontamination.

- Receive daily tasking and safety brief from the Decontamination Group Supervisor
- Clean facilities and vessels in accordance with the Vessel Decontamination Plan
- Upon completion of decontamination efforts, coordinate with the Decontamination Group Supervisor to have the Cleanup Assessment Team inspect the vessel and verify that the decontamination meets established guidelines for cleanliness

Survey Group. Coordinates all diving and survey operations within the established safety zone to assure safety of overall on-water operations.

- Approve/disapprove dive safety plans
- Coordinate all dive and survey operations with the Vessel Traffic Management Group, Safety Zone Group and the On-water Recovery Group

Safety Zone Group. Utilize waterborne resources to enforce integrity of the safety zone.

- Enforce requirements of the safety zone
- Coordinate with the Vessel Traffic Management Group and the Decontamination Group to monitor and enforce all movement of vessels (commercial cleanup) that are arriving, departing or shifting berths within the safety zone

Air Operations Branch Director (AOBD)

The AOBD should discuss with the Operations Section Chief the objective of the overflight mission to schedule the aircraft best suited for the mission. Overflight missions may include:

- Mapping the distribution and appearance of the oil
- Verifying modeled forecasts of the oil movement
- Providing responders with an overview of the incident
- Directing cleanup operations
- Providing equipment/personnel

Overflight missions for observations should take into consideration the following:

- In the early morning or early evening there is often not enough contrast to see some oils clearly.
- In the middle of the day, the sun may glare off the water surface, making it hard to distinguish oil.
- The flight track should be set up to minimize the glare with the optimum schedule for mapping oil distribution depending on the angle of the sun in mid-latitudes. The middle of the morning or afternoon is usually a good viewing time.

Personnel selected to conduct observations of oil spills should consult the Guidance for Aerial Observation of an Oil Spill

Planning Section

In addition to the traditional ICS Planning Section Units, response to an oil spill may require additional units be added (Figure 4) to enable the Planning Section to support incident operations.

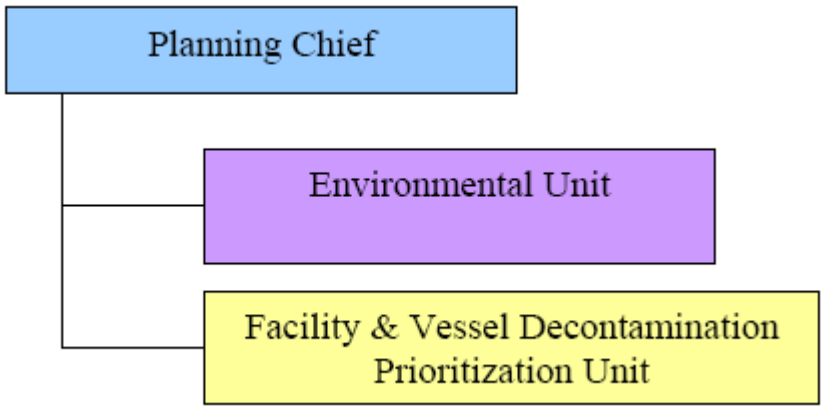

Figure 4. The Planning Section may require additional units not normally associated with the traditional ICS organization to enable the Planning Section to support response operations.

Depending on the size and complexity of the oil spill response the Planning Section Chief should determine the need to develop other supporting plans such as:

- Tarball and Debris Plan
- Commercial Vessel Decontamination Plan
- Waste Disposal Plan
- Wildlife Recovery Plan
- Water Column Monitoring Plan
- Dispersant Plan
- In-situ Burn Plan

Environmental Unit

The Environmental Unit responds to the changing demands of oil spills by developing with stakeholders a number of teams that solve specific tasks. The organization chart in Figure 5 includes several of the most common teams that work under the Environmental Unit during an oil spill response.

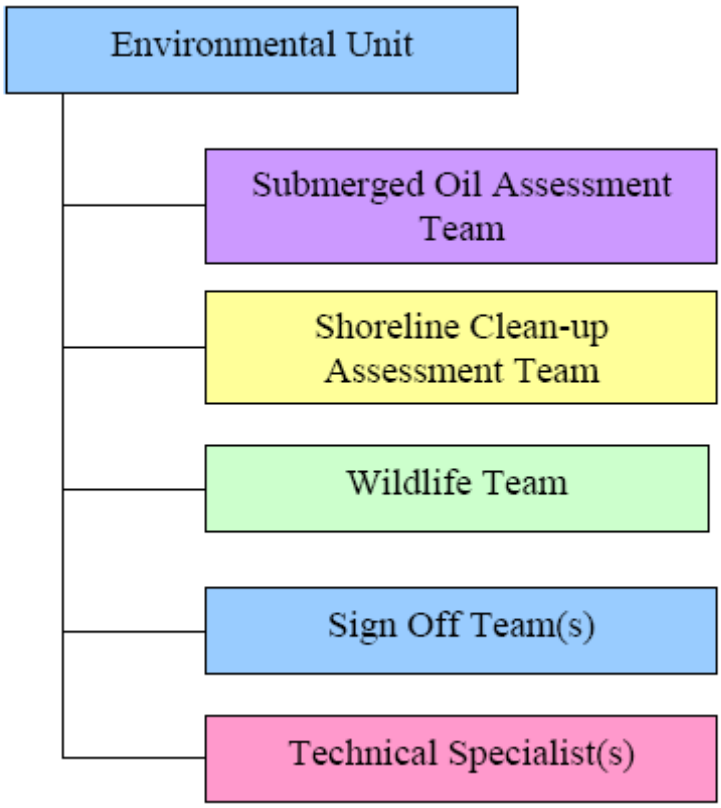

Figure 5. The Environmental Unit oversees a wide range of technical disciplines.

Environmental Unit Leader Responsibilities (not all inclusive)

- Assess the chemistry of the spilled oil to determine the oil's fate in the environment
- Provide support to the Safety Officer in development of the Site Safety Plan
- Provide expertise on living marine resources and their habitats and information on associated cleanup and mitigation methods
    - Coordinate with Federal and State Trustees the collection and dissemination of information on the environmental resources at risk, including marine resources
- Develop strategies to minimize environmental impact of the spill based on stakeholder consensus
    - Participate with State responders in the development of priority protection areas based on sensitive habitats
    - Coordinate consultation with the State Historic Preservation Officers concerning the location of cultural and historic resources
- Develop environmental monitoring strategies that will help decision-makers understand the impact of response countermeasures that have been implemented
- Provide technical support to the FOSC during negotiations with representatives from the oil industry, the Port, the Nuclear Power Plant, and the Nuclear Regulatory Commission
- Provide information on meteorological, hydrological, ice, and oceanographic conditions
    - Provide technical report on future ice conditions
    - Provide technical report forecasting movement of the spilled oil
- Assemble and coordinate environmental stakeholders to reach consensus on protection priorities and cleanup strategies and endpoints
    - Consider establishing a Science Team that includes State representation and technical specialists to evaluate the technical issues and reach consensus
    - Through the Science Team, coordinate with stakeholders the development of endpoints
- Assemble and coordinate trustees and stakeholders for Natural Resource Damage Assessment and Restoration
    - Participate with Damage Assessment Center staff in the implementation of an immediate sampling plan
    - Work with Trustee agencies to begin the process of the Endangered Species Act Section 7 consultation
- Provide timely and complete status reports to the Planning Section Chief
    - Prepare environmental data for the Situation Unit
    - Provide weather, shoreline oiling, mapping and graphics for use in all briefings and situational updates, media briefings and public outreach forums

- As directed by the Unified Command, participate in news conferences, media availabilities, open houses and town hall meetings
- Establish and maintain the Response Link website for internal communications with response agencies
- Act as the liaison between the Unified Command and the Regional Response Team (RRT) providing the RRT with daily updates
- Coordinate requests from the Unified Command to conduct testing of alternative response strategies with the RRT
- Coordinate requests from venders to test new products using the Alternative Response Tools Evaluation System (ARTES) process
- Coordinate the activities of wildlife agencies
- Coordinate and support Unified Command requests for conducting hydrographic surveys
- Develop environmental monitoring strategies that will help decision-makers understand the impact of response countermeasures that have been implemented
- Provide technical support to the FOSC during negotiations with representatives from the oil industry, the Port, the Nuclear Power Plant, and the Nuclear Regulatory Commission
- Provide information on meteorological, hydrological, ice, and oceanographic conditions
    - Provide technical report on future ice conditions
    - Provide technical report forecasting movement of the spilled oil
- Assemble and coordinate environmental stakeholders to reach consensus on protection priorities and cleanup strategies and endpoints
    - Consider establishing a Science Team that includes State representation and technical specialists to evaluate the technical issues and reach consensus
    - Through the Science Team, coordinate with stakeholders the development of endpoints
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    - Participate with Damage Assessment Center staff in the implementation of an immediate sampling plan
    - Work with Trustee agencies to begin the process of the Endangered Species Act Section 7 consultation
- Provide timely and complete status reports to the Planning Section Chief
    - Prepare environmental data for the Situation Unit
    - Provide weather, shoreline oiling, mapping and graphics for use in all briefings and situational updates, media briefings and public outreach forums
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- Coordinate the activities of wildlife agencies
- Coordinate and support Unified Command requests for conducting hydrographic surveys

Submerged Oil Assessment Team

- Supports Submerged Oil Group activities
- Design submerged oil assessment strategies
- Ensure sample techniques are approved by the State(s)
- Coordinate placement of water column monitoring devices with the State(s)
- Provide leadership in the development of monitoring strategies for submerged oil
- Assess recovery techniques
- Identify potential impacts of oil and recovery techniques

Shoreline Cleanup Assessment Team (SCAT)

Shoreline Cleanup Assessment Team(s) are critical to supporting response operations by visually assessing impacted areas and determining the best methods of removal, enabling the Operations Section Chief to focus their response resources and refine their tactical plans The SCAT Team Leader responsibilities include:

- Determining the number of SCAT teams required
- Configuring the Teams to ensure appropriate stakeholder representation
- Coordinating SCAT team activities
- Developing the SCAT process that would meet the objectives of the Unified Command and the data collection and documentation requirements of the Natural Resource Damage Assessment (NRDA) teams.
- Establishing on-scene Geographic Information System (GIS) mapping capabilities to capture SCAT results and provide information to Situation Unit and stakeholders
- Coordinating with the Responsibility Party's spill management team to ensure that SCAT information is shared with their scientific personnel

Wildlife Team

- Ensure all wildlife recovery personnel are adhering to accepted or incident-specific health and safety guidelines.
- Advise FOSC of the presence of any federally or state-listed species, and/or their supporting habitats.

- Make recommendation to minimize or avoid adverse impacts to the species or the supporting habitat, in coordination with the appropriate Endangered Species biologists
- Assist FOSC with initiation of emergency consultation under the Endangered Species Act as warranted

- Advise FOSC of the presence of populations of migratory birds, sensitive species and/or their habitats and offer recommendations to minimize or avoid adverse impacts
- Mobilize federal and/or state wildlife personnel for oversight or to assist in the collection or capture of oiled wildlife
- Assist law enforcement personnel in, or direct the setting-up of, morgue facilities
- Determine the need to enlist assistance from United States Department of Agriculture-Animal Plant Health Inspection Service (APHIS)-Wildlife Services
- Prepare a written oiled wildlife recovery plan to include, but not limited to:
  - Establishment of a hotline to report oiled wildlife
  - Advising cleanup contractors of wildlife recovery protocols
  - Establishing the veterinarian of record, and euthanasia protocols
  - Establishing protocols to report daily wildlife numbers to the FOSC
- Provide technical assistance in the prioritization sensitive areas for clean-up
- Provide technical assistance to minimize or avoid adverse impacts to trust species or lands held by any State, Tribes or the United States
- Provide technical assistance on clean-up end points and shoreline assessment techniques
- Prepare daily wildlife recovery unit summary for the Unified Command
- Prepare Wildlife Recovery Unit demobilization plan

Sign Off Team (SOFT)

The Sign Off Team is responsible for providing documentation to the Unified Command stating that areas impacted by the oil spill have been cleaned to agreed upon standards. SOFT members usually include representation from the land trustee, Coast Guard, Scientific Support Coordinator and the responsible party. SOFT responsibilities include:

- Evaluating areas identified by Operations as ‘clean’ to ensure that the agreed upon cleanup endpoints are met
- Working with Operations to identify areas that require further cleaning
- Providing signed documentation to the Unified Command that the area evaluated met the cleanup standard
- Coordinating any field activities with the Operations Section Chief
- Providing Documentation Unit Leader with the original copy of the SOFT documentation

Facility and Vessel Decontamination Prioritization Unit

The Facility and Vessel Decontamination Assessment Unit is responsible for supporting the Waterways Management Unit efforts to prioritize which commercial facilities and vessels will be decontaminated. The information provided by this Unit is one of several variables used in the final determination. Primary responsibilities:

- Interview port partners from the maritime industry to determine the variables (i.e. type of cargo, impact on community, etc.) to be used when prioritizing decontamination.
    - Representative sample of port facilities impacted by the spill
- Develop a mathematical model based on the economic impact that would result from delaying a return to normal operations
- Use the results of the model to rank order facilities and vessels
- Provide ranked outcome to Waterways Management to assist with their scheduling of facilities and vessels for decontamination.

Disposal Technical Specialist

The Disposal Technical Specialist is responsible for developing a waste disposal plan that meets the requirements of the local regulations. Specific responsibilities include:

- Contact Operations Section Chief to assess disposal needs for types and magnitudes of materials to be handled
- Identify available tankage for interim recovered liquids storage and location(s) for interim storage of solid wastes and track waste accumulations at each location
- Prepare a waste disposal plan and submit to the Planning Section Chief and Operations Section Chief for review
- Contact appropriate waste transportation contractors to determine capabilities and availability
- Designate liquid waste transfer locations and ensure compatibility of equipment with vacuum/tank trucks and/or skimmers/barges
- Ensure accurate waste accounting and tracking systems are in place
- Review the site safety plan with all waste management personnel and ensure they don the appropriate Personnel Protective Equipment (PPE)
- Make initial determination on hazardous nature of material through knowledge of material spilled and/or chemical analyses
- Contact potential waste treatment and disposal facilities to determine acceptance criteria and any additional characterization requirements
- Collect representative samples of oil/oily wastes if required by the treatment or disposal facilities for additional characterization
- Waste should be segregated:
    - Oil and oil water mixtures recovered from the water and shoreline
    - Oiled organic debris (wood, aquatic vegetation)
    - Oiled sorbents (pads, booms, snares, sweeps)
    - Oiled sediments

- Oiled PPE, containment boom, general trash
- Non-oiled and non-hazardous waste materials

- Document all waste collection, segregation, handling, transportation, and treatment/disposal activities to enable accurate tracking and ensure regulatory compliance

Other Technical Specialist

- Wetland Ecology – Freshwater Tidal Marshes
- Wetland Ecology – Salt Marshes
- Conservation Biology
- Water Quality – Contaminates
- Water Quality - Biogeocchemistry

National Resource Trustees

- Generally serve as key advisors, rather than as designated representatives on Unified Command
- Trustees need to immediately select a federal administrative lead to represent the trustees to the Unified Command
- The lead trustee should coordinate their concerns through the Liaison Officer. If there is no Liaison Officer, the lead trustee must coordinate directly with the Unified Command

Historic Property Specialist

- Assesses potential effects of emergency response strategies on historic properties in consultation with the parties identified in the ACP.
- Recommends to the FOSC response actions and policies developed in consultation with parties identified in the ACP to help minimize potential impacts to historic properties.

Logistics Section Chief

- Coordinate with the Operations Section Chief on dispersant requirements

Special Teams

The following are some of the special teams and other technical expertise that should be considered as potential response resources when responding to an oil spill:

- National Oceanic Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC)
- Atlantic Strike Team
- District 5 District Response Advisory Team
- District 5 Public Affairs Detachment
- Environmental Protection Agency (EPA) Environmental Response Team
- Navy Supervisor of Salvage
- Coast Guard Atlantic Area Incident Management Assist Team
- National Strike Force Public Information Assist Team
- Army Corps of Engineers
- NOAA Navigational Response Team (access through NOAA SSC)
- EPA On-scene Coordinators from Region II and III
- Occupational Safety and Health Administration
- United States Fish and Wildlife Service
- Animal Plant Health Inspection Service
- Historic Property Specialist
- Water Intake Specialist
- Army Corps of Engineers