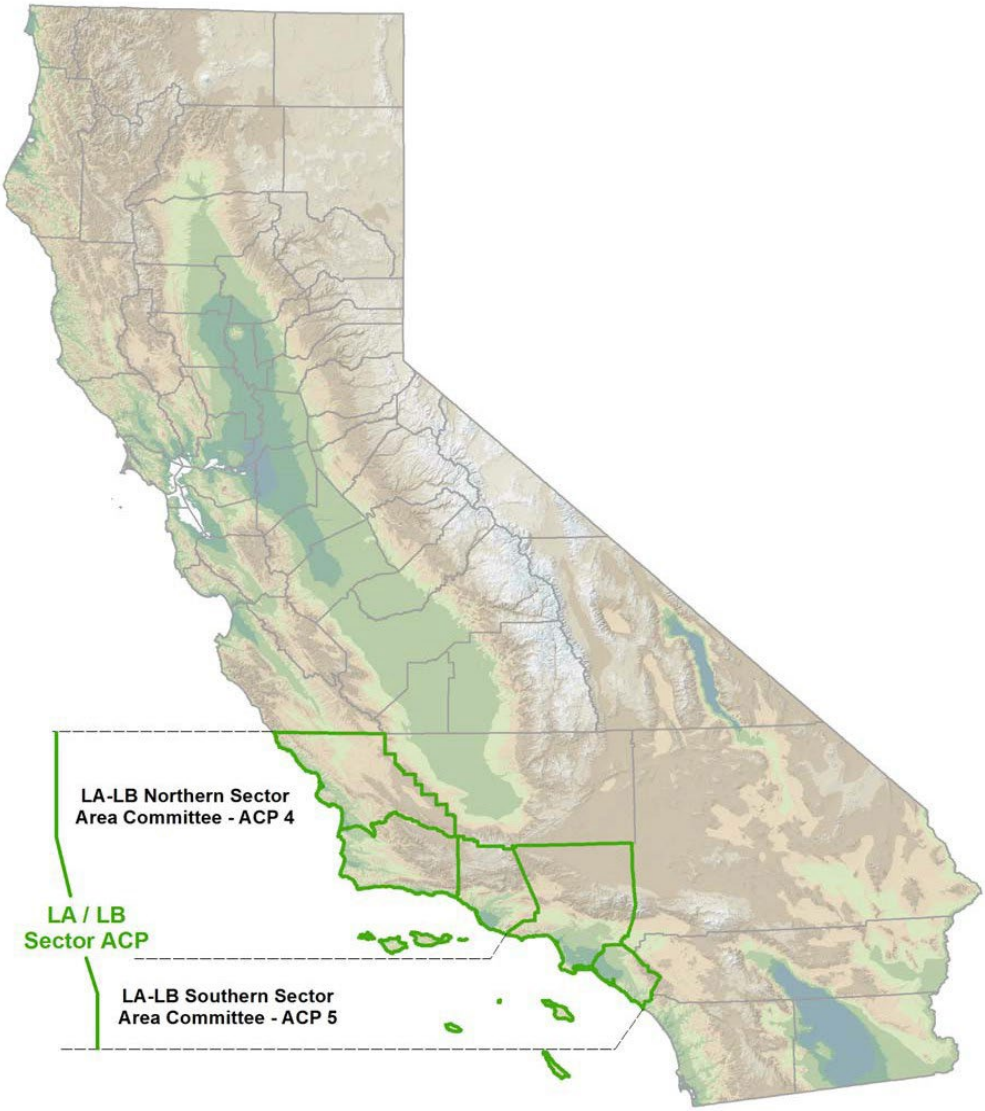
2023 Los Angeles-Long Beach Area Contingency Plan (v.2019.4)

Volume I



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United States Coast Guard

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16471
19 May 2023

MEMORANDUM

From: R. D. Manning, CAPT (s)
CG SECTOR Los Angeles-Long Beach

To: Distribution

Subj: PROMULGATION OF 2023 LOS ANGELES-LONG BEACH AREA CONTINGENCY PLAN, (v.2019.4).

1. This memorandum promulgates the 2023 annual update to the Area Contingency Plan (ACP) covering the Federal On-Scene Coordinator's (FOSC) Los Angeles-Long Beach Zone. This document will remain in effect until superseded by the competent authority.

2. Enclosed is the 2023 LOS ANGELES-LONG BEACH AREA CONTINGENCY PLAN. My principal guidance for marine environmental response is to remove a worst-case discharge of oil or release of a hazardous substance and to mitigate or prevent a substantial threat of such a discharge or release from a vessel, offshore facility, or onshore facility operating in or near the Coast Guard FOSC zone.

3. This plan fulfills the requirement for Sector Los Angeles-Long Beach to develop a supporting plan as mandated by the Oil Pollution Act of 1990 and the National Contingency Plan (40 CFR 300).

4. All earlier versions of the LOS ANGELES-LONG BEACH AREA CONTINGENCY PLAN are superseded by the 2023 LOS ANGELES-LONG BEACH AREA CONTINGENCY PLAN and should be appropriately recycled.

5. The 2023 LOS ANGELES-LONG BEACH AREA CONTINGENCY PLAN is available to the public on USCG Sector Los Angeles-Long Beach's Homeport site: https://homeport.uscg.mil/port-directory/los-angeles-long-beach. Publication via the Internet allows the Area Committee to provide the response community with the most up-to-date version of the ACP. While the ACP is updated annually, the ACP may also be updated with new information at any time by the Area Committee. Any such updates to this document shall be referred to as "interim updates" and will be made available on the USCG Sector Los Angeles-Long Beach Homeport site.

6. The LOS ANGELES-LONG BEACH AREA CONTINGENCY PLAN is updated through the efforts of the U.S. Coast Guard, The California Department of Fish and Wildlife Office of Spill Prevention and Response, and the Los Angeles-Long Beach Area Committee.

7. Comments and recommendations regarding this plan are welcome and should be submitted through the Los Angeles-Long Beach Area Committee.

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U.S. Department of Homeland Security

United States Coast Guard

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16600
MAY 1 0 2020

MEMORANDUM

From: P. W. Gautier, RADM
CGD ELEVEN (d)

Reply to Attn of: Mr. Jeffrey Slusarz
(510) 437-2959

To: CG SECTOR LA/LB (s)
Thru: CGD ELEVEN (dx)

Subj: FIVE YEAR APPROVAL TO THE 2019 LOS ANGELES/LONG BEACH (LA/LB) AREA CONTINGENCY PLAN (ACP)

Ref: (a) U. S. Coast Guard Marine Environmental Response and Preparedness Manual, COMDTINST M16000.14A

1. The 2019 LA/LB ACP has been reviewed for compliance with reference (a) and is hereby approved.

2. I applaud the LA/LB Area Committee for their collaborative teamwork with federal, state, and non-governmental organizations. The committee's continued support, noteworthy accomplishments and commitment to protecting the marine environment enhanced local preparedness and strengthened interagency partnerships.

3. A current version of the approved ACP including all appendices, annexes, and tabs shall be posted to the Homeport Port Directory site, as well as the California Department of Fish and Wildlife, Oil Spill Prevention and Response (OSPR) website for public access.

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Enclosure: (1) 2019 LA/LB ACP

Copy: CGD ELEVEN (dxc)

Record of Changes
2023 LA-LB ACP (v.2019.4)
Annual Update

This plan may be corrected or expanded at any time. The changes must be logged below and the new version must be posted to www.homeport.uscg.mil.

Date	Change	By Whom	Document
01SEP2020	9440 - Included Worst Case Discharge scenarios for each mode of transportation	Butch Willoughby	2020 LA-LB ACP
01SEP2020	Developed accountability system to track last validation test date for each sensitive site and the validation level. Stand-alone planning annex.	Butch Willoughby	2020 LA-LB ACP
01SEP2020	Carpinteria Marsh, 4-685, updated contacts, site description, and resources at risk. Increased the swamp and sorbent boom to 450 feet each	CDFW OSPR	2020 LA-LB ACP
01SEP2020	Rincon Creek, 4-701, Added the contact for the Carpinteria-Summerland Fire Protection District	CDFW OSPR	2020 LA-LB ACP
01SEP2020	Economic Sites, 4-6-SB-090, Added two seawater intakes at UCSB .33 miles southeast of Campus Point	CDFW OSPR	2020 LA-LB ACP
01SEP2020	Santa Monica Bay, 5-115, Topanga Creek, Added Southern California Steelhead and Tidewater Goby to the resources at risk	CDFW OSPR	2020 LA-LB ACP
01JUN2022	4770 – Potential Places of Refuge guidance added to Technical Support section.	Butch Willoughby	2022 LA-LB ACP
01JUN2022	4860 - ESA-7 guidance updated to align with NRT ESA-7 Emergency Consultation and Post-Response Procedures	Butch Willoughby	2022 LA-LB ACP

Date	Change	By Whom	Document
01JUN2022	48100 – PPOR Evaluation Team description added to required consultations section.	Butch Willoughby	2022 LA-LB ACP
01JUN2022	8000 – Potential Place of Refuge guidance, reference, and PPOR Job Aid links added.	Butch Willoughby	2022 LA-LB ACP
01JUN2022	ACP 4-567 Point Conception & Government Point: added point of contact for Dangermond Preserve	OSPR	2022 LA-LB ACP
01JUN2022	ACP 4-570 Damsite Canyon Creek: added point of contact for Dangermond Preserve	OSPR	2022 LA-LB ACP
01JUN2022	ACP 4-630 Eagle Canyon Creek: Add Jason Backhaus as the entry contact. 4-630.1: Build Sandbag Dam, increase sorbent boom from 40 to 100 feet. 4-630.2 Erect Filter Fence, decrease construction fencing from 4 to 1 X 100 feet, increase oil snare from 40 to 100 feet, and decrease T-posts from 15 to 5. Add 4-630.3: deploy exclusion boom with 100 feet of swamp boom, 100 feet of sorbent boom, and 4 anchors. Update map with strategy 4-630.3 with swamp boom.	OSPR	2022 LA-LB ACP
01JUN2022	ACP 4-635 Tecolote Creek: 4-635.1 only 200 feet of boom is needed to cover the mouth, number of anchors decreased to 4. Land access: coastal access pathway open 24/7, emergency access pathway has a locked gate.	OSPR	2022 LA-LB ACP
01JUN2022	ACP 4-660 Arroyo Burro Creek: changed GPS coordinates	OSPR	2022 LA-LB ACP

Date	Change	By Whom	Document
01JUN2022	ACP 5-115 Topanga Creek: added Southern California steelhead and tidewater goby to the resources at risk.	OSPR	2022 LA-LB ACP
01JUN2022	ACP 5-140 Ballona Creek: 5-140.1 Changed staff to deploy from 4 to 8 personnel	OSPR	2022 LA-LB ACP
01JUN2022	ACP 5-150 Ballona Lagoon Wetlands: updated phone numbers for Ballona Wetlands and Del Rey Lagoon tidal gates	OSPR	2022 LA-LB ACP
01JUN2022	ACP 5-250 Golden Shore Marine Reserve: reduced boom length to 1800 feet for protection strategy 5-250.2	OSPR	2022 LA-LB ACP
01JUN2022	ACP 5-325 Bolsa Chica - Restored Wetlands: Changed from one skiff or punt to one skiff and one work boat. This is because of the large amount of boom to be deployed and the velocity of the water in the Bolsa Chica Restored Wetlands inlet. Updated contact name/number for Reserve Manager.	OSPR	2022 LA-LB ACP
01JUN2022	ACP 5-330 Talbert Marsh: added new protection strategy 5-330.3 consisting of two 500 foot sections of boom across the marsh.	OSPR	2022 LA-LB ACP
01JUN2022	ACP 5-340 Newport Slough Wetland: Changed protection strategy from manually close tidal gates to boom off tidal gates with 400 ft for 340.1 and 300 ft for 340.2. Use four 22-lb anchors to secure. Updated map with new strategy.	OSPR	2022 LA-LB ACP
01JUN2023	ACP 4-655 Goleta Slough and Beach: reduced amount of boom needed to protect estuary mouth to 200 feet.	OSPR	2023 LA-LB ACP

Date	Change	By Whom	Document
01JUN2023	ACP 5-260 Alamitos Bay/Los Cerritos Wetlands: increased staff needed to deploy protection strategy to 4 personnel.	OSPR	2023 LA-LB ACP
01JUN2023	ACP 5-310 Anaheim Bay (Seal Beach National Wildlife Refuge): change protection strategy due to Naval Weapons Station Seal Beach construction. Added green sea turtle to resources at risk.	OSPR	2023 LA-LB ACP
01JUN2023	ACP 5-320 Inner Bolsa Chica: updated contact information, added green sea turtle to resources at risk.	OSPR	2023 LA-LB ACP
01JUN2023	ACP 5-330 Talbert Marsh: added Western snowy plover to resources at risk.	OSPR	2023 LA-LB ACP
01JUN2023	ACP 5-350 Santa Ana River: added burrowing owl to resources at risk.	OSPR	2023 LA-LB ACP

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1000 INTRODUCTION

1100 INTRODUCTION/AUTHORITY

The Oil Pollution Act of 1990 (OPA 90) amended the Federal Water Pollution Control Act (FWPCA) 33 U.S.C. 1321 (j) to address the development of a National Planning and Response System. As part of this system, Area Committees have been established for each area designated by the President. These Area Committees are comprised of qualified personnel from federal, state, local, and tribal government agencies.

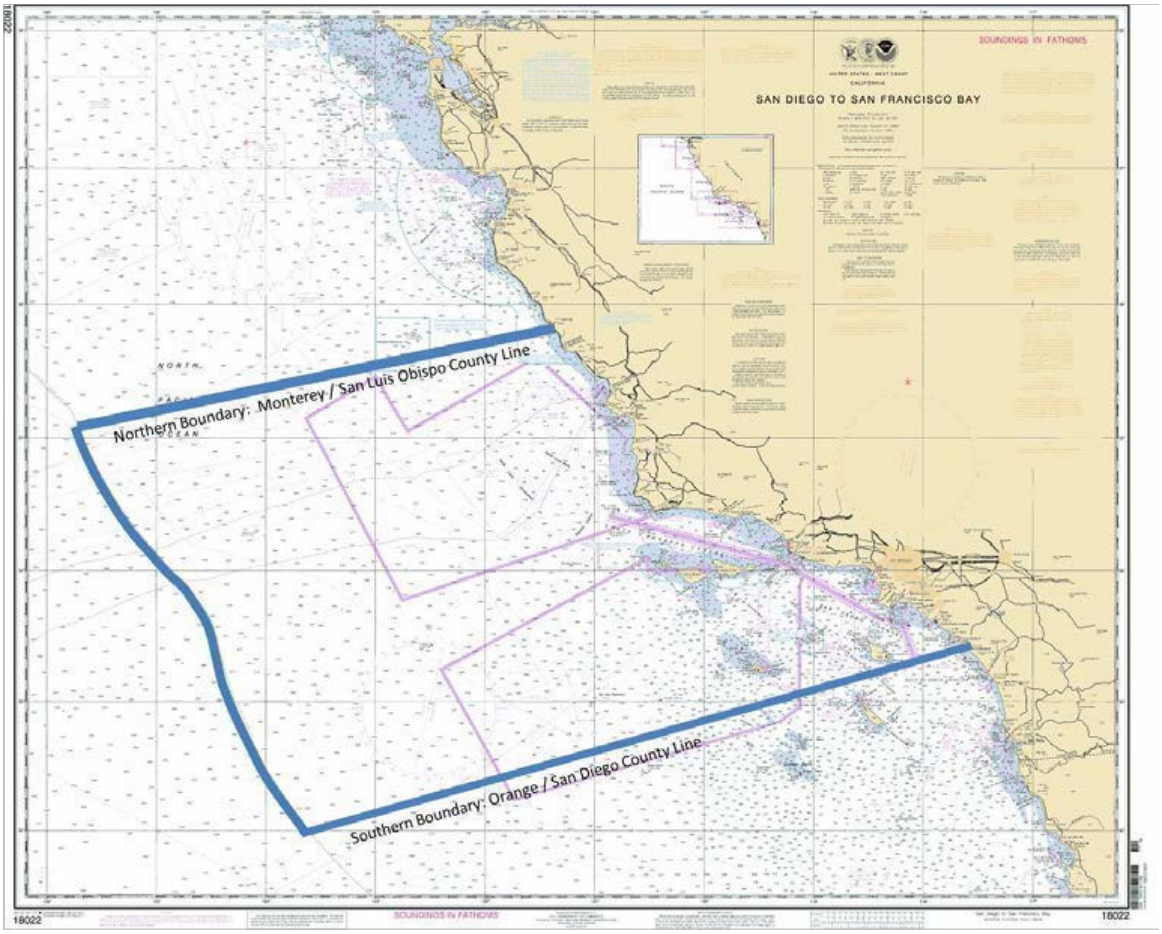
Each Area Committee, under the direction of the Federal On-Scene Coordinator (FOSC), is responsible for developing an Area Contingency Plan (ACP) which, when implemented in conjunction with the National Contingency Plan (NCP), shall be adequate to remove a worst case discharge of oil or a hazardous substance, and to mitigate or prevent a substantial threat of such a discharge from a vessel, offshore facility, or onshore facility.

The purpose of the Los Angeles – Long Beach Area Contingency Plan is:

- to be the primary guidance manual for responders to oil spills and hazardous substance releases.
- to provide for orderly and effective implementation of response actions to protect the people, natural resources, and property in the coastal zone from the impacts of an actual or substantial threat of oil discharges and/or hazardous substance releases, including Weapons of Mass Destruction (WMD).
- to promote the coordination of and describe the strategy for a unified and coordinated federal, state, local, tribal, responsible party, response contractors, and community response to an actual or substantial threat of oil discharges and/or hazardous substance releases.
- to provide guidance to Facility Response Plan, Vessel Response Plan, and Offshore Oil Spill Response Plan reviewers and plan holders to ensure consistency with this plan.

1200 GEOGRAPHIC BOUNDARIES

U. S. Coast Guard Sector Los Angeles-Long Beach's Captain of the Port (COTP) Area of Responsibility (AOR) is specified in 33 CFR 3.55-10 and comprises the landmasses and waters of California from the Monterey-San Luis Obispo County line extending south to the Orange-San Diego County line. Under OPA 90, Federal removal authority was extended to include the waters of the exclusive economic zone (EEZ).



The Coast Guard COTP is the pre-designated Federal On-Scene Coordinator (FOSC) for incidents originating in the coastal zone while the EPA provides the On- Scene Coordinators (OSC) for incidents originating in the inland zone. These boundaries recognize the Coast Guard's primary responsibility over discharges and releases in navigable waters from vessel and waterfront facilities. The demarcation line between the coastal-inland zones generally follows the Pacific Coast Highway (US 1). The demarcation line deviates from US 1 in most urban areas to other thoroughfares bordering the immediate coastline.

Northern Sector – San Luis Obispo, Santa Barbara, & Ventura Counties

The USCG/EPA boundary is defined from the Southern Ventura County line north on US 1 along the coast to Hueneme Road (Oxnard); west to Ventura Road; north to Channel Islands Blvd.; west to Harbor Blvd.; north to US 101; north along US 101 to Route 225 (Santa Barbara); Route 225 west to US 101; north along US 101 to Gaviota. Within Gaviota State Park shift to Southern Pacific railroad tracks; along the mainline tracks to Black Road (Casmalia); north to US 1; north to the San Luis Obispo/ Monterey County Line.

Southern Sector – Los Angeles & Orange Counties

The USCG/EPA boundary is defined by the San Diego/Orange county line at I-5 north to Pacific Coast Highway (US 1); US 1 north to Jamboree Road (Newport Beach); north to Bristol Street; west to Irvine Avenue; south to 17th Street; west to Route 55; south to US 1; US 1 north to Golden West Street (Huntington Beach); and north to Warner Avenue; west to Bolsa Chica; north to Westminster Avenue. West along Westminster Blvd to US 1; north to 7th Street; west to Ximeno Avenue; south to Livingston Drive; west to Ocean Blvd.; west along Ocean Blvd. to the intersection with Los Angeles River's east bank; north along Los Angeles River east bank to Anaheim Street; west to Alameda Street; south to Harry Bridges Blvd (Wilmington); west to Gibson Blvd.; south to N. Front St., east to Harbor Blvd. (San Pedro); south to Crescent Avenue; southwest to 21st Street; west to S. Mesa St; south to W. 22nd St.; west to Pacific Avenue; south to Shepard St; west to Paseo Del Mar; west to Western Avenue; west and north to 25th Street; 25th Street/Palos Verdes Drive around the Palos Verdes Peninsula to US 1; north to Beryl Street (Redondo Beach); west to Harbor Drive; north to Hermosa Ave; north to 35th St; east to Manhattan Ave; north to 15th St; east to Highland Ave; north to Vista Del Mar; north to Culver Blvd. (Playa del Rey); and north to US 1 to the Ventura County line.

1300 AREA COMMITTEE

1310 Purpose

The Federal Water Pollution Control Act (FWPCA) encourages local contingency planning to coordinate community response to oil discharges and hazardous substance releases. The Oil Pollution Act of 1990 (OPA 90) expanded upon FWPCA and required the establishment of Area Committees consisting of qualified members of Federal, State, local, and tribal government agencies.

The primary objective of an Area Committee is to provide for effective spill response planning and preparedness. Area Committees develop, maintain and exercise Area Contingency Plans (ACPs). Area Committees provide a forum for bringing together Federal, State, local, and community stakeholders for the purpose of planning and preparing for responses to major incidents that affect multiple jurisdictions. Major response actions require extraordinary cooperation and coordination among all levels of government.

1320 Organization

There are six Area Committees within California: North Coast, San Francisco Bay & Delta, Central Coast, LA-LB Northern, LA-LB Southern and San Diego.

To optimize resources and time, the LA-LB Area Committee and Area Contingency Plan is a consolidation of the legacy northern and southern sectors. The Area Committee is made up of experienced environmental, scientific, and technical disciplines from federal, state and local government agencies, and tribes with definitive responsibilities for the area's environmental integrity. The FOSC will serve as Chair for the Area Committee. The FOSC should designate a representative from California Department of Fish and Wildlife Office of Spill Prevention and Response (OSPR) to serve as Vice-Chair.

The Area Committee is encouraged to solicit advice, guidance, or expertise from all appropriate sources and establish sub-committees as necessary to accomplish the preparedness and planning tasks. Sub-committee participants may include facility owners/operators, shipping company representatives, cleanup contractors, emergency response officials, marine pilots associations, academia, environmental groups, consultants, response organizations, or concerned citizens. The sub-committee Chair must be an appointed member of the Area Committee.

OPA 90 prohibits industry representatives from holding Area Committee memberships, however, industry participation in Area Committee meetings is invaluable. Key industry stakeholders will fulfill a participant function.

1330 Charter Members

(contact information listed in Section 9200 Personnel & Services Directory)

Chair: U.S. Coast Guard

Vice-Chair: California Department of Fish and Wildlife, Office of Spill Prevention and Response

Charter Members:

Federal:

Department of Homeland Security (DHS)

U. S. Coast Guard (USCG)

Federal Emergency Management Agency (FEMA)

Department of Defense (DOD)

U. S. Navy (USN)

U. S. Army Corps of Engineers (USACE)

Department of the Interior (DOI)

Bureau of Indian Affairs (BIA)

Bureau of Safety and Environmental Enforcement (BSEE)

National Parks Service (NPS)

U. S. Fish and Wildlife Service (USFWS)

Department of Commerce (DOC)

National Oceanic and Atmospheric Administration (NOAA)

National Marine Fisheries Service (NMFS)

Department of Transportation (DOT)

Pipeline and Hazardous Materials Safety Administration (PHMSA)

U. S. Environmental Protection Agency (EPA)

State:

California Department of Fish & Wildlife, Office of Spill Prevention and Response California Office of Emergency Services

Local Emergency Planning Committee – CA Region I

California State Lands Commission

California Coastal Commission

Local:

San Luis Obispo County Office of Emergency Services

Santa Barbara County Office of Emergency Services

Ventura County Office of Emergency Services

Los Angeles Office of Emergency Management

Orange County Office of Emergency Services

Fire Departments and associated Marine Units

Port of Los Angeles

Port of Long Beach

Port of Hueneme

1400 NATIONAL RESPONSE SYSTEM

The National Response System is a mechanism routinely and effectively used to respond to a wide range of oil and hazardous substance releases. It is a multi-layered system involving individuals and teams from tribal, local, state, and federal agencies, as well as industry and other organizations. These groups share expertise and resources to ensure that response and cleanup activities are timely, efficient, and minimize threats to human health and the environment.

1410 National Response Framework

The National Response Framework (NRF) is a guide to how the Nation responds to all types of disasters and emergencies. It is built on scalable, flexible, and adaptable concepts identified in the National Incident Management System (NIMS) to align key roles and responsibilities across the nation. The NRF describes specific authorities and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or catastrophic natural disasters. The NRF sets the doctrine for how the United States builds, sustains, and delivers the National Preparedness Goal's response core capabilities: Prevention, Protection, Mitigation, Response, and Recovery.

The NRF supports the responsibilities of the FOSC, under the direction of both FWPCA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal

authorities. The FOSC coordinates or directs on-scene response resources and efforts during a pollution incident using the support of the National Response Team (NRT), Regional Response Team (RRT), State Representatives, Area Committees, Special Teams, contractor resources and responsible parties as necessary to supply the needed personnel, equipment, and scientific support to complete an immediate and effective response to any oil discharge or hazardous substance release.

1410.1 Spill of National Significance (SONS)

A Spill of National Significance (SONS) classification provides additional support at the national level to the FOSC. Per 40 CFR 300.323 the Commandant for the Coast Guard holds the authority for declaring a SONS. Some or all of the conditions below will exist when classifying a spill a SONS:

- A spill of size, magnitude and/or complexity that presents a significant challenge(s) to the Coast Guard FOSC and the RRT.
- Local and regional resource coordination or the Unified Commands incident management capability is exceeded.
- Multiple unified incident command posts (ICPs) have been established
- One or more Area Command(s) (UACs) has/have been established

The Coast Guard Commandant may choose to and has the authority to name a National Incident Commander (NIC) to assist the FOSC with interagency and governmental/public affairs coordination.

When an oil spill incident is an element of a larger response governed by a Stafford Act Presidential disaster declaration, it is unlikely that a SONS classification would be necessary. The Federal Emergency Support Function (ESF #10) within a Joint Field Office (JFO) will coordinate the national level response support.

1420 Regional Response Team (RRT) Structure

The Regional Response Team (RRT) ensures that the multi-agency resources and expertise of the NRS are available to support the FOSC as needed during a pollution incident. The RRT is comprised of representatives from the 15 federal member agencies plus state representatives and is co-chaired by the Coast Guard and the EPA. The principal components of the RRT are a standing RRT and incident-specific RRTs. Each incident-specific RRT is formed from the standing team when the RRT is activated for a response. Instructions for activating an incident-specific RRT are located in the Regional Contingency Plan (RCP).

1430 Area Response Structure

An Area Command is established to oversee the management of (1) multiple incidents that are each being handled by an ICS organization, or (2) large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that

incidents are properly managed, and ensure that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multijurisdictional. This allows each jurisdiction to have representation in the Area Command. Representatives to the Area Command would typically be at the highest executive levels within a responding organization such as a state governor or direct representative, and CEO or President of the affected commercial entity.

When an Area Command is established, Incident Commanders (FOSCs), will report to the Area Commander. Although the general concept for a nationally significant response involves an oil spill, major natural disasters such as earthquakes, floods, or hurricanes create many incidents affecting multi-jurisdictional areas. Due to their size and potential impact, these incidents provide an environment for the use of Area Command as deemed appropriate by the lead federal agency.

It is important to remember that Area Command does not replace the Incident Command level ICS organization or functions.

1430.1 Federal/State Role in Incident Response

USCG Sector Los Angeles-Long Beach maintains and manages incident management teams for response to discharges of oil and releases of hazardous substances in the coastal zone. FOSCs are responsible for determining the source, cause, and responsible party, as well as initiating source control and enforcement actions as appropriate. Additional responsibilities include ensuring containment, cleanup, and disposal are carried out adequately, notification of all Natural Resource Trustees, and coordination of activities with federal, state, tribal, and local agencies.

The State of California has pre-designated the California Department of Fish and Wildlife, Office of Spill Prevention and Response (OSPR) to act as the lead state agency/State On-Scene Coordinator (SOSC) for all oil spills or threatened oil spills affecting the land, coastal waters, or any other waters of California. The SOSC shall provide clear designation of the responsibilities and jurisdictions for all state agencies to avoid unnecessary duplication of activities.

1440 Incident Command System

Emergency Responders at all levels of government use Incident Command System (ICS) structures to manage response operations. ICS is a management system designed to integrate facilities, equipment, personnel, procedures, and communications within a common organizational structure. Typically, the incident response is structured to facilitate activities in five areas: command, operations, planning, logistics, and finance/administration.

1450 Area Exercise Mechanism

The FOSC shall periodically conduct Government Initiated Unannounced Exercises to measure response capabilities. This action will allow effective assessments of industry response plans. The national Preparedness for Response Exercise Program (PREP) meets the intent of section 4202(a) of the Oil Pollution Act of 1990 (OPA 90). PREP guidelines are designed to provide a mechanism

for compliance with exercise requirements, while being economically feasible for the government and the oil industry to adopt and sustain. PREP is a unified Federal effort that satisfies the exercise requirements of the U.S. Coast Guard (USCG), the Environmental Protection Agency (EPA), the Pipeline and Hazardous Materials Safety Administration (PHMSA), and the Bureau of Safety and Environmental Enforcement (BSEE). These exercises may include participation by federal, state, local agencies, owners and operators of vessels and facilities in the area, and private industry.

1460 Federal Response Framework

See Section 1410 of this plan.

1470 Nuclear/Radiological Incident Annex (NRIA)

The NRIA (formerly the Federal Radiological Emergency Response Plan) to the National Response Framework describes the policies, situations, concepts of operations, and responsibilities of the Federal departments and agencies governing immediate response and short-term recovery activities for incidents involving release of radioactive materials to address the consequences of the event. These incidents may occur on Federal-owned or licensed facilities, privately owned property, urban centers, or other areas and may vary in severity from the small to the catastrophic. The incidents may result from inadvertent or deliberate acts. The NRIA applies to incidents where the nature and scope of the incident requires Federal response to supplement the State, Tribal, and/or Local incident response.

1500 State/Local Response System

California laws applicable to the prevention, response, and management of releases of oil and hazardous materials are numerous. The California Department of Fish and Wildlife, Office of Spill Prevention and Response has the primary responsibility for response to releases of oil in the marine environment and releases of deleterious substances into the waters of the State. The Office of Emergency Services has primary responsibility for off-highway spills that do not affect waters of the State and the California Highway Patrol is responsible for response to on-highway spills.

1600 National Policy and Doctrine

Section 4201 of OPA 90 amended Subsection I of Section 311 of the FWPCA, to require the Federal OSC to "in accordance with the National Contingency Plan and any appropriate Area Contingency Plan, ensure effective and immediate removal of a discharge, and mitigation or prevention of a substantial threat of a discharge, of oil or a hazardous substance – (i) into or on the navigable waters; (ii) on the adjoining shorelines to the navigable waters; (iii) into or on the waters of the exclusive economic zone; or (iv) that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States."

The National Incident Management System (NIMS) Incident Command System is the recognized standard with which spill management teams must demonstrate compatibility and is the measure by which regulatory agency plan reviewers, exercise evaluators, and spill responders will gauge the adequacy of response actions. While this system allows considerable operational flexibility, it

includes a collaborative planning process that delineates key management position responsibilities, common use of forms, essential Incident Action Plan elements and response personnel and equipment resource tracking methods.

1610 Public vs. Private Resource Utilization

The Oil Pollution Act of 1990 (OPA 90) reaffirmed the basic principle that the primary source of an oil spill preparedness and response system in the U.S. should be implemented and maintained by the private sector. It is not, nor should it be, the Coast Guard's intent to compete with the commercial oil and hazardous materials pollution response industry. The Coast Guard's pre-positioned response equipment other publicly owned response equipment, and other initiatives under the Coast Guard's oil spill response program are only intended to supplement the oil and clean-up industry's response program or be used if the commercial industry does not have readily available resources, and only until such time that the Federal On-Scene Coordinator (FOSC) or the Unified Command decides to release the resources. At the direction and discretion of the FOSC and the Unified Command, when the responsible party executes a suitable response, any government equipment deployed should be withdrawn as commercial equipment becomes available and is placed into service.

1620 Best Response Concept

The term "Best Response" means that a response organization will effectively, efficiently, and safely respond to oil spills, minimizing the consequences of pollution incidents and protecting our national environmental and economic interests.

"Best Response" equals a successful response based on achievement of certain key success factors as follows: Human Health, Natural environment, Public Communication and Stakeholders Support.

1630 Cleanup Assessment Protocol (How clean is clean?)

When to terminate specific oil spill cleanup actions can be a difficult decision. The increasing cost of the cleanup and the damage to the environment caused by cleanup activities must be weighed against the ecological and economic effects of leaving the remaining oil in place. The decision to terminate cleanup operations is incident specific.

Cleanup usually cannot be terminated while the following conditions exist:

- Recoverable quantities of oil remain on water or shores.
- Contamination of shore by fresh oil continues.
- Oil remaining on shore is mobile and may be refloated to contaminate adjacent areas and near shore waters.

Cleanup may normally be terminated when the following conditions exist:

- The environmental damage caused by the cleanup efforts is greater than the damage caused by leaving the remaining oil or residue in place.

- The cost of cleanup operations significantly outweighs the environmental or economic benefits of continued cleanup.

The FOSC, after consultation with the members of the Unified Command, determines that the cleanup should be terminated.

1640 Dispersant Pre-Approval/Monitoring/Decision Protocol

At the time of an oil spill incident, the FOSC is authorized to evaluate the use of chemical dispersants. Currently, all dispersant use in California is governed by either the pre- approval process; the preapproval with consultation process; or the incident-specific RRT approval required process. Detailed information regarding implementation of these processes as well as all applicable checklists are outlined in the RRT IX California Dispersant Use Plan.

For more information about the RRT IX California Dispersant Use Plan, contact Ms. Ellen Faurot-Daniels at the California Office of Spill Prevention & Response, ellen.faurot-daniels@wildlife.ca.gov; (831) 649-2888.

1650 In Situ Burn (ISB) Approval/Monitoring/Decision Protocol

Physical removal and subsequent disposal or recycling/re-use of the spilled oil is preferred. However, mechanical recovery may be limited by equipment capability, weather and sea state, storage and disposal problems, and spill magnitude. Use of in-situ burning should be considered by the FOSC when use of this technique will lessen the environmental impacts of the spill.

The RRT IX California On-Water *In-Situ* Burn (ISB) Plan applies to the coastal waters of California. It calls for RRT IX involvement in every proposed use of in-situ burning due to concerns about air pollution. In-situ burning operations in inland areas are governed by the RRT IX Inland In-Situ Burning Plan. For more information about the ISB Plans, contact Ms. Ellen Faurot-Daniels at the California Office of Spill Prevention & Response, ellen.faurot-daniels@wildlife.ca.gov; (831) 649-2888.

1660 Non-Dispersant Oil Spill Cleanup Agents Approval/Monitoring/Decision Protocol

There are a number of non-dispersant oil spill cleanup agents that can be considered for oil spill remediation. (e.g. sorbents, solidifiers, herding agents, de-emulsifiers, bioremediants). Each of these products has its own considerations and limitations for use, and fall under the decision-making authorities of the Region IX Regional Response Team. For more information on the use of any of these products in California contact, Ms. Ellen Farout-Daniels at the California Office of Spill Prevention & Response, ellen.faurot-daniels@wildlife.ca.gov; (831) 649-2888.

1670 Fish and Wildlife Acts Compliance: Migratory Bird Treaty Act (MBTA), Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA).

Migratory Bird Treaty Act (MBTA)

The Coast Guard both enforces environmental laws and regulations related to migratory birds and must also ensure its own compliance with these laws as it conducts its mission, activities and operations. Response operations in areas where migratory birds are present have the potential to result in a migratory bird take.

Unified Command should ensure collaboration with USFWS to avoid and mitigate potential negative impacts to migratory birds, during response operations.

Executive Order 13186 Responsibilities of Federal Agencies to Protect Migratory Birds (2001) directs federal agencies to develop a Memorandum of Understanding (MOU) and to work with USFWS to promote the conservation of migratory bird populations.

The MOU directs the USCG to:

- Use the NEPA process as the primary means to evaluate the potential environmental impacts of proposed actions and alternatives, including impacts to migratory birds and their habitats.
- Collaborate with USFWS to avoid and mitigate potential negative impacts to migratory birds, during the NEPA process or other environmental planning.
- Coordinate with environmental scientists to develop strategies to avoid or minimize negative effects on migratory birds.

Refer to 50 CFR 10.13, USFWS List of MBTA Species.

Marine Mammal Protection Act (MMPA)

The National Oceanic and Atmospheric Administration (NOAA) West Coast Marine Mammal Stranding Network was established in the early 1980s under the Marine Mammal Protection Act (MMPA). Members of the network respond to marine mammal stranding events along the Washington, Oregon, and California coasts and are part of a nationwide network. For more information on the National Marine Mammal Health and Stranding Response Program (MMHSRP) please visit the NOAA Fisheries website.

To report a dead, injured or stranded marine mammal, please call: 866-767-6114.

For law enforcement, harassments, and other violations, please call: 1-800-853-1964.

Endangered Species Act

The Endangered Species Act provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The U.S. Fish and Wildlife Service (FWS) of the Department of the Interior maintains the list of endangered species and threatened species. Under ESA Section 7(a)(2) federal agencies are required to consult on actions that may affect listed species and/or habitat. Spill response activities that may result in an adverse effect to listed species/habitat require emergency consultation. Emergency consultation

will be accomplished by including USFWS and/or NMFS in the Incident Command System organization established by the FOSC. These representatives will provide timely recommendations to eliminate/minimize adverse effects to listed species/habitat.

Refer to Section 4860 for more information on ESA Section 7 Consultations.

ESA MOU Among USCG, EPA, USFWS, NOAA

1680 Protection of Historic Properties (National Historic Preservation Act, NHPA)

The National Historic Preservation Act of 1966 (Public Law 89-665) requires agencies using federal funds to identify, evaluate, and where significant, protect historic, archaeological, and traditional cultural properties. This Act also authorized the National Register of Historic Places (NRHP) and the National Historic Landmarks programs, expanding Federal recognition to historic properties of local and State significance. The National Park Service in the DOI administers both programs. Regulations for these programs are contained in 36 CFR Part 60, National Register of Historic Places, and 36 CFR Part 65, national Historic Landmarks Program. Oil can contaminate archaeological, historic, and culturally sensitive resources. Such contamination can prevent carbon dating, damage the fragile artifacts, and make restoration and preservation extremely difficult or impossible. In addition, oil spill response activities (e.g., mechanical cleanup and staging area constriction) can physically disturb or destroy artifacts and sites. The primary contact for responders seeking information and expertise on local culturally sensitive areas is the State Archeologist in the State Historic Preservation Office for the State or the Tribal Historic Preservation Officer for the affected tribal lands. It is important that responders be aware of the types of archaeological, cultural, or historic materials that they are likely to encounter while responding to an incident and that they will immediately notify the FOSC/UC in the event that these types of materials are discovered.

National Register of Historic Places

1690 Alternative Response Technology Evaluation System (ARTES)

During an oil or chemical spill, the On-Scene Coordinator (OSC), who directs the response, may be asked to consider using alternative countermeasure (a method, device, or product besides mechanical methods). To assess whether a proposed countermeasure could be a useful response tool, it is necessary to quickly collect and evaluate the available information about it.

ARTES is designed to evaluate potential response tools on their technical merits, rather than on economic factors and can also be used to evaluate more conventional countermeasures.

ARTES is designed for two uses:

- To evaluate a product's appropriateness for use during a specific incident, under specific circumstances.
- As a pre-evaluation to identify conditions under which favorable outcomes are anticipated when a product is used.

An advantage of ARTES is that it provides a management system for addressing the numerous proposals submitted by vendors and others during a spill.

For more information on the ARTES process and/or the selection of any Alternative or Applied Response Technologies contact, Ms. Ellen Farout-Daniels at the California Office of Spill Prevention & Response, ellen.faurot-daniels@wildlife.ca.gov; (831) 649-2888.

16100 Special Monitoring of Applied Response Technologies (SMART)

Special Monitoring of Advanced Response Technologies is a cooperatively designed monitoring program for in-situ burning and dispersants. SMART relies on small, highly mobile teams that collect real-time data using portable, rugged, and easy-to-use instruments during dispersant and in-situ burning operations. Data are channeled to the Unified Command to address effectiveness of dispersants in dispersing the oil in the water column or if airborne particulates concentrations at sensitive locations exceed the level of concern. Having monitoring data can assist the Unified Command with decision-making for dispersant and in- situ burning operations. The Coast Guard Pacific Strike Team maintains qualified personnel and equipment to perform SMART.

2000 COMMAND

2100 UNIFIED COMMAND

Although a single Incident Commander normally handles the command function, an ICS organization may be expanded into a Unified Command (UC). The UC is a structure that brings together the "Incident Commanders" of all major organizations involved in the incident in order to coordinate an effective response while at the same time carrying out their own jurisdictional responsibilities. The UC links the organizations responding to the incident and provides a forum for these entities to make consensus decisions.

The UC is responsible for overall management of the incident. The UC directs incident activities, including development and implementation of overall objectives and strategies, and approves ordering and releasing of resources. Members of the UC work together to develop a common set of incident objectives and strategies, share information, maximize the use of available resources, and enhance the efficiency of the individual response organizations.

Refer to the Incident Commander Job Aid.

2110 Command Representatives

There are three (3) Command Representatives comprising the Command Staff.

- **Public Information Officer (PIO)** – The IO is responsible for the coordination and release of all information to the response workers, the media and the public. In addition, the IO is responsible for press releases and the scheduling of press conferences related to the incident. The IO may also establish a Joint Information Center (JIC), which is a coordination with the media and other agencies, to facilitate the coordinated release of available information.

- **Liaison Officer (LOFR)** - Establish liaison, as needed, with representatives of assisting and cooperating agencies, elected officials, stateholders, and non- governmental organizations (NGOs). The LOFR works closely with the Public Information Officer and the Volunteer Coordinator.

- **Safety Officer (SOFR)** - The SOFR is responsible for the safety of all responders associated with the response and compliance with applicable safety laws and regulations. Also, the Safety Officer is responsible for assessing hazardous and unsafe situations and developing measures for assuring personnel safety. This responsibility is limited to the boundaries of the response and does not extend to public safety measures not under the incident control and authority of the IC/UC.

There are Four(4) Command Representatives comprising the General Staff.

- **Planning Section Chief** is responsible for the development of the Incident Action Plan (IAP) and identifying alternative strategies for the containment and cleanup of the discharge or release.

- **Operations Section Chief** is responsible for management of the tactical response to the discharge or release, including containment and cleanup efforts.

- **Logistics Section Chief** is responsible for ensuring that the necessary personnel and equipment are obtained and delivered to conduct response operations.

• **Finance/Administration Section Chief** is responsible for the accounting management of Fund expenditures, including documentation for claims and cost recovery. This position will typically be staffed by SILC, District, or NPFC representative for marine oil spills under Coast Guard jurisdiction. EPA may staff this position with Contracting Officers from their regional office.

2110.1 Federal Representative

When the FOSC has determined that a discharge or release has occurred or there is a substantial threat of a discharge or release, she/he is authorized by the NCP to direct all private, State, or Federal actions to remove the discharge or release or to mitigate or prevent the threat of such a discharge or release. Upon receipt of notification of a discharge or release, the FOSC is responsible for conducting a preliminary assessment to determine the threat to human health and the environment; the responsible party and its capability to conduct the removal; and, the feasibility of a removal or the mitigation of impact.

The Federal OSC directs Federal response efforts and coordinates all other Federal efforts at the scene of a discharge or release. If the jurisdictions of USCG/EPA overlap, the two agencies will discuss who will take OSC based on whether the impact is greater to the inland or coastal zone.

A list of general FOSC responsibilities is located in Appendix J of the expired Coast Guard Marine Environmental Response Manual, COMDTINST M16000.14A.

2110.2 State Representative

During responses to marine oil spills, local agencies may provide agency representatives who interface with the command structure through the State On-Scene Coordinator (SOSC), Liaison Officer, or the State representative. The SOSC plays an essential role in the Unified Command alongside the FOSC. In California, the SOSC is the Administrator of the California Department of Fish and Wildlife Office of Spill Prevention and Response. In 1990, the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act was enacted, which covers all aspects of marine oil spill prevention and response in California. The Act established the Administrator, having the authority to direct prevention, removal, abatement, response, containment, and cleanup efforts regarding all aspects of any oil spill in State marine waters.

2110.3 Responsible Party Representative

When appropriate, the NRS is designed to incorporate a unified command and control support mechanism generally consisting of the FOSC, the State Incident Commander, the Local Incident Commander, and the Responsible Party Incident Manager. The Responsible Party has primary responsibility for cleanup of a discharge.

Each responsible party for a vessel or a facility from which oil is discharged, or which poses a substantial threat of a discharge, into or upon the navigable waters or adjoining shorelines or the Exclusive Economic Zone is liable for the removal costs and damages.

Each responsible party for a vessel or facility from which a hazardous substance is released, or which poses a substantial threat of a discharge, is liable for removal costs.

In an incident involving two or more responsible parties, each responsible party for a vessel or facility from which oil or hazardous substances is discharged is liable for the removal costs and damages. Each responsible party's liability extends to the entire incident not just its own material.

2110.4 Local Government Representatives (LGOSC)

Local governments require the ability to address operational coordination and policy issues as part of their statutory obligations to protect life, property, and the environment.

When a spill occurs, the FOSC and SOSC shall evaluate the situation and may exercise the option to appoint a Local Government On-Scene Coordinator (LGOSC) as a member in the Unified Command (UC). Local governments may request appointment of an LGOSC via the SOSC utilizing the coordination procedures outlined under California's Standardized Emergency Management System (SEMS). Local governments may establish a Local Government Operational Area Multi-Agency Coordination Group (OA MAC). The OA MAC can nominate a qualified representative from among its member agencies to serve as the LGOSC as part of the Unified Command. The LGOSC will present the OA MAC concerns and viewpoints to the UC, provide the UC with pertinent information on the availability of local resources and address information distribution, operational coordination, and policy issues with the UC.

If local governments are unable to serve as an LGOSC the local government can and should provide agency representatives who interface with the command structure through the Liaison Officer. Additional local government representatives may serve as needed in the Planning and Operations sections.

To be considered for an LGOSC position within the UC, the local government representative shall meet or exceed the same requirements as the FOSC, including but not limited to:

a. Jurisdictional authority or functional responsibility or delegated authority under a law or ordinance for the incident.
b. Incident or response operations within the organization's area of responsibility.
c. Specifically authorized by law or ordinance with commanding, coordinating, or managing incident response.
d. Full organizational authority to make decisions and execute all of the tasks assigned to the UC on behalf of the local government.
e. Staffing to support and sustain 24/7 participation in Unified Command.
f. Willingness to abide by incident command principles.
g. Thorough understanding of the Incident Command System (ICS) and ICS Operational Planning Cycle.

2120 Guidance for Setting Response Objectives

In support of U.S. policy, the response objectives that should be implemented by the Unified Command are to allocate resources to their optimum use. The priorities of strategic objectives must be carefully considered since they vary from case to case, but generally they are as follows:

- Ensure the Safety of the public and all responders
- Stop the source
- Contain the spill
- Open Water Response
- Shoreline Protection and Response Shoreline Cleanup

The only variance from this strategy should be considerations of safety and the protection of critical environmentally sensitive or economically, culturally or archeologically significant resources that may demand protection even though work force and equipment may be deployed elsewhere to more efficiently recover oil.

2200 SAFETY

The FOSC has specific responsibilities for addressing worker health and safety concerns at a response scene, in accordance with the NCP (40 CFR Section 300.150). Response actions must comply with the provisions for response action worker safety and health in 29 CFR 1910.120. Requirements, standards, and regulations of state occupational safety and health laws must be complied with where applicable.

The Safety Officer (SOFR) writes or approves the Site Safety Plan. All response personnel are required to read and sign the Site Safety Plan prior to commencing activities.

During the Initial Reaction phase, the responding Oil Spill Response Organization (OSRO) will perform an initial site assessment to include air monitoring. The OSRO will create the initial Site Safety Plan to allow first responders to commence response activities prior to the official Site Safety Plan issued by the Safety Officer/Unified Command.

The SOFR is responsible for the safety of all activities associated with the response and compliance with applicable safety laws and regulations. Safety is also responsible for assessing hazardous and unsafe situations and developing measures for assuring personnel safety. This responsibility is limited to the boundaries of the response and does not extend to public safety measures not under the incident control and authority of the IC/UC.

Refer to the SOFR Job Aid.

2210 Site Characterization

A preliminary evaluation of a site's characteristics shall be performed prior to site entry by a qualified person to aid in the selection of appropriate employee protection methods prior to site entry. Immediately after initial site entry, a more detailed evaluation of the site's specific

characteristics shall be performed by a qualified person to further identify existing site hazards and to further aid in the selection of the appropriate engineering controls and personal protective equipment for the tasks to be performed.

The following information, to the extent available, shall be obtained by the employer prior to allowing employees to enter a site:

1. Location and approximate size of the site. (documented in ICS 201 and later in ICS 208)
2. Description of the response activity and/or the job task to be performed. (documented in ICS 201, and later expanded in ICS 208)
3. Duration of the planned employee activity. (dependent on the size and complexity of the spill)
4. Site topography and accessibility by air and roads. (possibly available in the RP's OSRP, document in ICS 208)
5. Safety and health hazards expected at the site. (document in ICS 201, and eventually in ICS 208, and ICS 215-A)
6. Pathways for hazardous substance dispersion. (should be captured in the RP's OSRP)
7. Present status and capabilities of emergency response teams that would aid hazardous waste clean-up site employees at the time of an emergency. (should be available in the RP's OSRP, documented in ICS 201)
8. Hazardous substances and health hazards involved or expected at the site, and their chemical and physical properties. (captured/available via facility, or vessel SDS database)

2220 Site Safety Plan

The site safety and health plan, which must be kept on site, shall address the safety and health hazards of each phase of site operation and include the requirements and procedures for employee protection.

The site safety and health plan, at a minimum, shall address the following:

(A) A safety and health risk or hazard analysis for each site task and operation found in the Incident Action Plan.

(B) Employee training assignments to assure compliance with HAZWOPER regulations.

(C) Personal protective equipment to be used by employees for each of the site tasks and operations being conducted.

(D) Medical surveillance requirements.

(E) Frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment to be used.

(F) Site control measures.

(G) Decontamination procedures.

(H) An emergency response plan for safe and effective responses to emergencies, including the necessary PPE and other equipment.

(I) Confined space entry procedures.

(J) A spill containment program.

2300 INFORMATION

Public Information Officer (PIO)

The Public Information Officer (PIO) is responsible for developing and releasing information, with Unified Command's approval, about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations in a timely manner. The PIO will obtain information from technical experts to provide to the press and other interested parties. The PIO is also responsible for controlling direct media access to staff within the ICS structure.

Refer to the Public Information Officer Job Aid.

2310 Protocol for Access/Timing of Media Briefings

Pollution incidents that generate significant media interest usually require news conferences or briefings, at least in the first few days of emergency response. These media gatherings provide an opportunity for the Unified Command to tell the media what has happened and what they are doing about it. It also gives reporters a chance to photograph and ask questions of senior response officials. Details on access/timing of media briefings can be found in the Public Information Officer Job Aid located in the Coast Guard Incident Management Handbook web-based application.

Media contact information is located in Section 9240.2 Media.

2320 Joint Information Center

The physical location of the public information team during an incident can have a profound impact on their overall effectiveness. The PIO may set up work locations in the Incident Command Post (ICP) and if the incident is large enough, may need to set up a Joint Information Center (JIC) near the incident command or off-site to help manage public information needs. The JIC location needs to be functional and free of interruptions and distractions, while remaining close to the UC and Technical Specialists. More information on JIC requirements can be found in the Public Information Officer Job Aid located in the Public Information Officer Job Aid located in the Coast Guard Incident Management Handbook web-based application.

2400 LIAISON

The job of Liaison Officer (LOFR) during an emergency response is a critical one. The LOFR is responsible for effectively coordinating with participating organizations (assisting and cooperating agencies) and stakeholders in support of the incident. This can have a large impact on the efficiency of resources used and on the perception of stakeholders regarding the success or appropriateness of the response activities. These factors are critical to overall response success. Personnel assigned to this position should have a good liaison/governmental affairs background and experience

working with people in other organizations. Since this is a key position in the response organization, assignment should be based on experience level.

Refer to the LOFR Job Aid.

2410 Investigators

The U. S. Coast Guard is responsible for investigating marine casualties and oil spills that take place in the coastal zone. The EPA is responsible for investigating oil spills in the inland zone and chemical releases regardless of location. California Office of Spill Prevention and Response (OSPR) is the state agency responsible for investigating oil spills in the inland and coastal zone within state waters. The California Department of Toxic Substances Control (DTSC) is the state agency responsible for investigating chemical releases.

2420 Federal/State/Local Trustees

The Regional Response Team is responsible for assisting the FOSC, who shall ensure that trustees for natural resources are promptly notified of discharges or releases. The FOSC shall coordinate all response activities with affected natural resource trustees and shall consult with affected trustees on appropriate removal action to be taken. In accordance with the NCP, FOSCs are required to contact the Department of the Interior when a discharge may impact any natural resource including endangered species or their habitat.

Pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Federal Trustees are federal officials who are to act on behalf of the public as trustees for natural resources.

State trustees shall act on behalf of the public as trustees for natural resources, including their supporting ecosystems, within the boundary of a state or belonging to, managed by, controlled by, or appertaining to such state.

The tribal chairmen (or heads of the governing bodies) of Indian tribes, or a person designated by the tribal officials, shall act on behalf of the Indian tribes as trustees for the natural resources, including their supporting ecosystems, belonging to, managed by, controlled by, or appertaining to such Indian tribe, or held in trust for the benefit of such Indian tribe, or belonging to a member of such Indian tribe, if such resources are subject to a trust restriction on alienation.

2430 Agency Reps

An Agency Representative is an individual assigned to an incident from an assisting or cooperating agency who has been designated authority to make decisions on matters affecting that agency's participation at the incident. AREP's report to the LOFR or to the IC in the absence of a LOFR.

During responses to marine oil spills, local agencies are not usually involved specifically as part of a unified command but provide agency representatives.

2440 Stakeholders

Stakeholders can be divided into different categories - environmental, economic, and political. Each of these types of groups can be characterized by its linkage to community stakeholders. A list of these groups and their contact information can be found in Section 9250 Stakeholders.

2440.1 Non-Governmental Organization (NGO) Stakeholders

Non-Governmental Organization Stakeholders are groups or organizations whose communities may be affected by response related decisions made (or not made) by the Incident Commander or the Unified Command. NGOs differ in the ways they are affected by emergency management decisions. The impact these response related decisions have on NGOs varies with respect to the incident and the particular NGO's stake in the response. Some are impacted to a greater/lesser degree than others.

Engaging all stakeholders, including Non-Governmental Organizations, as soon as possible in the response, has proven to be critical to the overall success of oil spill response in California. NGOs can provide unique, local resources, knowledge, and other benefits that make valuable contributions to the response. NGOs can also assist the Liaison Officer or a member of the Command Staff in distributing information to other stakeholders through electronic communications or in community meetings external to the incident command post. The Liaison Officer or a member of the Command Staff should use the Stakeholder Engagement Matrix located in Section 9250.7 of the Appendix for successful implementation and tracking of communications and engagement with all stakeholders, including NGO Stakeholders. Any person, group, or organization affected by and having a vested interest in the incident and/or the response operation.

2450 Site Access

Oil spill academic researchers, non-governmental organizations (NGOs), or other stakeholders may wish to gain access to the spill site to observe operations, conduct research and/or conduct independent sampling.

The Safety Officer, NOAA Scientific Support Coordinator (SSC) and CDFW OSPR Environmental Scientists can assist Liaison Officers with background information, evaluating safety issues at the site and interpreting technical documents that these organizations may provide with their requests. Liaison Officers will make recommendations to approve/disapprove research requests to the Unified Command, who will make the final decision.

After a site access request has been approved, an ICS 213 (General message) will be distributed to the following for safety and de-confliction: Safety Officer, Public Information Officer, Liaison Officer, Operations Section Chief, Planning Section Chief, Logistics Section Chief, Finance/Admin Section Chief.

3000 OPERATIONS

3100 OPERATIONS SECTION ORGANIZATION

The Operations Section Chief (OSC) is responsible for the management of all operations directly applicable to the primary mission. The Operations Section Chief activates and supervises elements in accordance with the Incident Action Plan and directs its execution; activates and executes the Site Safety Plan; directs the preparation of unit operational plans; requests or releases resources; makes expedient changes to the Incident Action Plans as necessary; and reports such to the Incident Commander.

There is only one Operations Section Chief for each operational period and is normally, but not always, from the jurisdiction or agency which has the greatest involvement either in terms of resources assigned or area of concern.

Refer to the OSC Job Aid.

3110 Organization Options

The operations organization is designed to be highly flexible so that it can be used during any type of emergency. Unlike other sections of ICS organization, Operations builds from the bottom up, only adding layers of management to maintain span of control when the size of the Operations Sections requires more focused oversight.

3200 RECOVERY AND PROTECTION

The Recovery and Protection Branch Director and the Protection Group Supervisor are responsible for the deployment of containment, diversion, collection, protection and absorbing boom in designated locations. Depending on the size of the incident, the Protection group may be further divided into teams, task forces, and single resources.

3210 Protection

The goal of most containment and recovery strategies is to collect the spilled oil from the water and prevent it from reaching sensitive resources. Frequently, this is not possible and sensitive resources are oiled in spite of response efforts, especially during large oil spills. Often the goal will be to minimize environmental impact using a variety of booming, containment, and recovery techniques. Protection strategies and site-specific information is listed in Volume II, Section 9800 of the Appendix.

3210.1 Containment and Protection Options

Protection strategies and site-specific information are listed in Volume II, Section 9800 of the Appendix.

3220 On-Water Recovery

Oil removal/recovery in open water is accomplished using skimming devices once the oil has been contained. Skimmers can be freestanding in which the skimmer is a separate piece of equipment which pumps the oil-water mixture from the surface of the water into tanks on a vessel. These skimmers are usually driven by hydraulic units on board a vessel. Self- propelled skimmers have a skimmer as an integral part of the vessel.

"Vessels of opportunity", such as fishing vessels, may be used to deploy or tow boom and, depending on their size, be equipped with skimming equipment. They need to have adequate deck space and lifting cranes to carry the necessary equipment. The Coast Guard's Vessel of Opportunity Skimming System (VOSS) can be deployed on a variety of vessels.

Oil recovery techniques and equipment are different in near-shore/shallow water locations than open water. Shallow draft vessels and smaller boom and skimmers are used in these situations. These vessels can maneuver into tight places behind and under wharfs or in sloughs and can actually skim next to shore in many near-shore locations.

Coastal shallow water or near-shore strategies will differ in certain respects. In addition to the need for small, shallow draft vessels, specialized vessels such as kelp cutters and harvesters may also be needed. California's rocky coast can make near-shore operations difficult and even dangerous during high surf and winter conditions.

3220.1 Recovery Options

Skimmers

Weir Skimmers: recover oil by aligning a barrier just below the surface of the water and having oil floating on the water surface pass over the weir into a recovery box or into a pump. Weir skimmers are not the most efficient recovery systems because a large amount of water is usually collected along with the recovered oil. They do not function well in uneven seas or whenever currents exceed 0.7 knots.

Vortex Skimmers: a turbine-like fan, mounted below the surface, is used to create a current, which draws in oil floating on the water. It is then pumped to a collection tank. The device is mounted on a vessel or floats at the water surface.

Sorbtion/Oleophilic Skimmers: use materials that will retain a high percentage of oil minimizing the amount of water collected with the oil. Skimming devices can be belts, ropes, brushes, or discs that contact the oil. The device then will either wring or scrape the oil from the material into a collection point for removal to a storage tank. Some belt or brush skimmers are very effective in currents exceeding 2 knots and more aggressive sea conditions.

Suction Skimmers: operate in conjunction with a pump that draws liquid into the skimming device. The skimmer head generally floats on the water with an oil/water mixture being drawn into the skimmer. A typical application would include a skim head used with a truck mounted vacuum system.

Vacuum Trucks

Vacuum trucks are frequently essential equipment for cleanup of oil spills. A hose is extended from the truck to the oil collection or containment site to pick up the oil. If the oil is floating on water, the suction hose can be connected to a "duck bill" nozzle that has a long horizontal slot to allow the oil to be picked up while minimizing the amount of water collected. A weir-type skimmer can also be connected to the suction hose to suck the thin layer of oil from the surface and minimize the amount of water collected at the same time. Both methods require a full-time attendant to adjust the equipment and clear debris.

Vacuum trucks work best when the oil layer is thick. If there is only a thin layer of oil on the water, much more water will be collected than oil. Recovery of a large quantity of water can make a vacuum truck operation very inefficient because the tank will quickly fill with water and little oil.

The operation can be made more efficient if the oil/water mix recovered is allowed to separate in the tank and the water decanted back to the containment area. Decanting must be approved by state and federal agencies.

Dredges

Suction dredges are rarely used to recover oil or oiled sediments from the bottom of a water body. If dredging is considered as a recovery technique, there must be provisions for containment and storage of large quantities of water recovered along with the oil or oiled sediment. A large quantity of oil-contaminated water can present significant storage, transport, and disposal problems, which must be resolved before the activity has begun. These problems can be diminished if oil/water separation is provided, and decanting of water back to the containment area is allowed by state and federal agencies.

3220.2 Storage

To expedite removal of spilled oil, refined products, and contaminated materials from marine waters during an emergency-response, containment activities (to include temporary waste storage) may be conducted at appropriate on-shore locations. The transportation of oil and contaminated material to temporary waste storage sites during an emergency response is exempt from transportation and manifesting requirements, these requirements are also exempted per 22 CCR 66263.30 and/or 66263.43 for transportation-related emergency responses.

Such an area may include, but is not limited to, permitted or interim status hazardous waste storage facilities, other non-permitted facilities, vessels, barges, tanks, vacuum trucks, barrels, containers, storage piles, or other appropriate containment methods and locations that may be used to hold recovered oil and/or oily materials. Temporary storage sites need not be owned, operated, or leased by the RP. Temporary storage sites that are on- shore should be established at locations that are convenient to the recovery operations. The location of the temporary storage site, however, must be done with the concurrence of the following:

- FOSC
- DTSC [The DTSC duty officer can be contacted at one of the following phone numbers: Region 1 (Sacramento) @ 916-255-3564; Region 2 (Oakland) @ 510-540-3739; Region 3 (Glendale) @ 818-551-2830; and Region 4 (Long Beach) @ 310-590-4968.]
- California Coastal Commission Oil Spill Program: for information on emergency permits for temporary storage sites within the coastal zone call the CCC Oil Spill Program, Deputy Director 415-904-5205 or 24 hour cell phone 415-693-8375.
- Regional Water Quality Control Board (RWQCB), and local health, fire and emergency services departments.

3230 Shoreside Recovery

Sound cleanup decisions depend on accurate information about the types of habitats that the oil affects, the degree of oiling, and the location of oiling. NOAA's *Characteristic Coastal Habitats: Choosing Spill Response Alternatives* illustrates typical physical and biological attributes of North American coastal habitats at risk from oil spills. The text describes each habitat and discusses both how oil is likely to behave there and considerations for treating oil.

The document summarizes the technical rationale for selecting response methods for four categories of oil in specific habitats. *Characteristic Coastal Habitats* can help you select appropriate response options to minimize the adverse environmental impacts of a marine oil spill. The guide discusses intertidal, subtidal, ice, and on-water habitats. Specific response options include natural recovery; mechanical, chemical, and biological treatment; and in-situ burning. The document is located online at: Characteristic Coastal Habitats.

3230.1 Shoreline Cleanup Options

This section lists and describes techniques, which may be required for use during a shoreline cleanup. It should be noted that methods noted with an (*) will require special consideration and authorization by the natural resource trustee prior to commencement of work. The trustee agency(s) for fish and wildlife resources will make the final recommendations to the Unified Command on which specific method(s) to employ on a case-by-case basis. Currently approved methods are:

Natural Recovery

Objective: No attempt made to remove any stranded oil, when there is no effective method for cleanup or to minimize impact to the environment.

Description: No action is taken, oil is left to degrade naturally. Monitoring of contaminated areas is required.

Applicable Habitat Types: All habitat types.

When to Use: When natural removal rates are fast (e.g., gasoline evaporation or high energy coastlines), when the degree of oiling is light, access is severely restricted or dangerous to cleanup crews, or when cleanup actions will do more harm than natural recovery.

Biological Constraints: This method may be inappropriate for areas used by high numbers of mobile animals (birds, marine mammals) or endangered species.

Environmental Effects: Same as from the oil alone.

Waste Generation: None.

Barriers/Berms

Objective: To prevent entry of oil into a sensitive area or to divert oil to a collection area.

Description: A physical barrier other than a boom is placed across an area to prevent oil from passing through into sensitive habitats. Barriers can consist of earthen berms or filter fences. When it is necessary for water to pass because of water volume, underflow or overflow dams are used.

When to Use: When the oil threatens sensitive habitats, and other barriers are not feasible. Berms also serve to protect sensitive areas when cleaning adjacent shorelines.

Applicable Habitat Types: At the mouths of creeks or streams to prevent oil from entering from offshore, or to prevent oil from being released from the creek into offshore waters. Also, on beaches where a high berm can be built above the high-tide line to prevent oil from over-washing the beach and entering a sensitive back-beach habitat (e.g. lagoon).

Environmental Effects: May disrupt or contaminate sediments and adjacent vegetation. The natural beach or shore profile should be restored (may take weeks to months on gravel beaches).

Biological Constraints: Responders must minimize disturbance to sensitive areas, such as shorebird nesting sites on beaches. Placement of dams and filter fences could cause excessive physical disruptions to the site, particularly in wetlands.

Waste Generation: Sediment barriers will become contaminated on the oil side and filter fence materials will have to be disposed of as oily wastes.

Manual Oil Removal/Cleaning

Objective: To remove oil with hand tools and manual labor.

Description: Removal of surface oil with hands, rakes, shovels, buckets, scrappers, sorbents, pitchforks, etc., and placing in containers. No mechanized equipment is used. Manual recovery includes underwater recovery of submerged oil by divers with hand tools, for example.

Applicable Habitat Types: Can be used on all habitat types.

When to Use: Light to moderate oiling conditions for stranded oil or heavy oils that have formed semi-solid to solid masses that can be picked up manually.

Biological Constraints: Foot traffic over sensitive areas (wetlands, tidal pools, etc.) should be restricted or prevented. There may be periods when shoreline access should be avoided, such as during bird nesting.

Environmental Effects: Minimal if surface disturbance by crew movement and waste generation is controlled.

Waste Generation: May generate significant quantities of oil mixed with sediment, which must be properly disposed of or treated. Decontamination of hand tools may produce oily wastewater that must be treated properly. Worker personal protective gear is usually disposed of daily or decontaminated and the resulting oily wastewater treated properly.

Mechanical Oil Removal

Objective: To remove oil from shorelines and bottom sediments with mechanical equipment.

Description: Oil and oiled sediments are collected and removed using mechanical equipment such as backhoes, graders, bulldozers, dredges, draglines, etc. This method requires systems for temporary storage, transportation, and final treatment and disposal.

Applicable Habitat Types: On land, wherever surface sediments are both amenable to and accessible to heavy equipment. Mechanical recovery is appropriate for submerged oil, used in sheltered areas where oil accumulates. Additionally, it can be used on viscous to solid oil on the water's surface.

When to Use: When large amounts of oiled materials must be removed care should be taken to remove sediments only to the depth of oil penetration, which can be difficult when using heavy equipment. Mechanical methods should be used carefully where excessive sediment removal may cause erosion.

Biological Constraints: Heavy equipment may be restricted in sensitive habitats (e.g., wetlands, soft substrate) or areas containing endangered species. Operators will need special permission to use in areas with known cultural resources. Dredging in sea grass beds or coral reef habitats may be prohibited. The noise generated by the mechanical equipment may also be a constraint.

Environmental Effects: The equipment is heavy, with many support personnel required. Mechanical methods may be detrimental if excessive sediments are removed without replacement. All organisms in the sediments will be affected, although the need to remove the oil may make this response method the best overall alternative. Re-suspension of exposed oil and fine-grained oily sediments can affect adjacent bodies of water.

Waste Generation: Can generate significant quantities of contaminated sediment that must be cleaned or land filled. The amount of waste generated by this cleanup option should be given careful consideration by response planners when reviewing potential environmental impacts of the oily wastes, debris, and residues.

Sorbents

Objective: To remove surface oil by absorption onto oleophilic (oil-attracting) material placed in water or at the waterline.

Description: Sorbent material is placed *on the floating oil or water surface* to allow it to absorb oil, or alternatively, the material can be used to wipe or dab stranded oil. Forms include sausage boom, pads, rolls, sweeps, snares, and loose granules or particles. These products can be either synthetic or natural substances. Efficacy depends on the capacity of the sorbent, energy available for lifting oil off the substrate, and stickiness of the oil. Recovery of all sorbent material is mandatory. Loose particulate Sorbents must be contained in a mesh or other material.

Applicable Habitat Types: Can be used on any habitat or environment type.

When to Use: When oil is free-floating close to shore or stranded on shore. The oil must be able to be released from the substrate and absorbed by the sorbent. Often used as a secondary treatment method after gross oil removal and in sensitive areas where access is restricted. Selection of sorbent varies by oil type; heavy oils only coat surfaces, requiring a high surface area to be effective, whereas lighter oils can penetrate sorbent material.

Biological Constraints: Access for deploying and retrieving sorbents should not be through soft or sensitive habitats or affect wildlife. Sorbent use should be monitored to prevent overuse and generation of large volumes of waste. Sorbents should not be used in a fashion that would endanger or trap wildlife. Sorbents left in place too long can break apart and present an ingestion hazard to wildlife.

Environmental Effects: Physical disturbance of habitat during deployment and retrieval. Improperly deployed or tended sorbent material can crush or smother sensitive substrates.

Waste Generation: Sorbents must eventually be collected for proper disposal so care should be taken to select and use sorbents properly and prevent generation of large amounts of lightly oiled sorbents. Recycling should be emphasized rather than disposal.

Vacuum

Objective: To remove oil pooled on a shoreline substrate or sub tidal sediments.

Description: A vacuum unit is attached via a flexible hose to a suction head that recovers free oil. The equipment can range from small, portable units that fill individual 55-gallon drums to large super suckers that are truck or vessel mounted and can generate enough suction to lift large rocks. Removal rates from substrates can be extremely slow.

Applicable Habitat Types: Any accessible habitat type. Vacuum machinery may be mounted on barges for water-based operations, on trucks driven to the recovery area, or hand-carried to remote sites.

When to Use: When oil is stranded on the substrate, concentrated in trenches, or trapped in vegetation. Usually requires shoreline access points.

Biological Constraints: Special restrictions should be established for areas where foot traffic and equipment operation may be damaging, such as soft substrates. Operations in wetlands need to be very closely monitored, with a site-specific list of restrictions developed to prevent damage to vegetation.

Environmental Effects: Minimal, if foot and vehicular traffic is controlled and minimal substrate is damaged or removed.

Waste Generation: Collected oil and or oil/water mix will need to be stored temporarily prior to recycling or disposal. Oil may be recyclable; if not, it will require proper disposal. Large amounts of water are often recovered, requiring separation and treatment.

Debris Removal

Objective: To remove contaminated debris from the shoreline or water surface.

Description: Manual or mechanical removal of debris from the shore or water surface. Debris removal can include cutting and removal of oiled logs.

Applicable Habitat Types: This method can be used on any habitat or environment type where access is safe.

When to Use: Driftwood and debris are heavily contaminated and provide a potential source of chronic oil release. Debris removal may create aesthetic problems, be a source of contamination for other resources in the area or cause clogging problems in the skimmer and create safety problems for responders. Debris removal is used in areas of debris accumulation on beaches prior to oiling to minimize the amount of oiled debris to be handled.

Biological Constraints: Foot traffic over sensitive areas (wetlands, spawning grounds) needs to be restricted. There may be periods when access should be restricted (spawning periods, influx of large numbers of migratory water birds).

Environmental Effects: Physical disruption of substrate, especially when mechanized equipment must be deployed to recover a large quantity of debris.

Waste Generation: Debris removal will generate contaminated debris (volume depends on what, and how much, is collected, e.g., logs, brush). Unless there is an approved hazardous waste incinerator that will take oily debris, burning will seldom be allowed especially on-site. This option should still be explored, especially for remote locations, with the appropriate state or federal agencies that must give approvals for burning.

Sediment Reworking/Tilling

Objective: To enhance the rate of degradation, by breaking up oily sediments and surface oil deposits, increasing the surface area, and mixing deep subsurface oil layers to the surface.

Description: The oiled sediments are roto-tilled, disked, or otherwise mixed using mechanical equipment or manual tools. Along beaches, oiled sediments may also be pushed to the water's

edge (surf washing) to enhance natural cleanup by wave activity. The process may be aided with high-volume flushing of gravel.

When to Use: On sand to gravel beaches with subsurface oil, where sediment removal is not feasible (due to erosion or disposal problems). On sand beaches, where the sediment is stained or lightly oiled, appropriate where oil is stranded above normal high waterline.

Biological Constraints: Avoid use on shores near sensitive wildlife habitat, such as fish-spawning areas or bird-nesting or concentration areas because of the potential for release of oil and oiled sediments into adjacent bodies of water. Tilling should not be used in shellfish beds.

Environmental Effects: Due to the mixing of oil into sediments, this method could further expose organisms that live below the original layer of oil. Repeated mixing over time could delay reestablishing organisms. Refloated oil from treated sites could contaminate adjacent areas.

Waste Generation: None.

Vegetation Cutting/Removal

Objective: To remove portions of oiled vegetation or oil trapped in vegetation to prevent oiling of wildlife or secondary oil releases.

Description: Oiled vegetation is cut with weed-whackers, blades, etc., and picked or raked up and bagged for disposal.

Applicable Habitat Types: Habitats composed of vegetation such as wetlands, sea grass beds, and kelp beds.

When to Use: When the risk of oiled vegetation contaminating wildlife is greater than the value of the vegetation that is to be cut, and there is no less-destructive method that removes or reduces the risk to acceptable levels.

Biological Constraints: Operations must be strictly monitored to minimize the degree of root destruction and mixing of oil deeper into the sediments. Access in bird-nesting areas should be restricted during nesting seasons. Cutting only the oiled portions of the plants and leaving roots and as much of the stem as possible minimizes impact to plants.

Environmental Effects: Vegetation removal will destroy habitat for many animals. Cut areas will have reduced plant growth, and in some instances, plants may be killed. Cutting at the base of the plant stem may allow oil to penetrate the substrate, causing subsurface contamination. Along exposed sections of shoreline, the vegetation may not recover, resulting in erosion and habitat loss. Trampled areas will recover much more slowly.

Waste Generation: Cut portions of oiled plants must be collected and disposed.

Flooding

Objective: To wash oil stranded on the land surface to the water's edge for collection.

Description: A perforated header pipe or hose is placed above the oiled shore or bank. Ambient-temperature water is pumped through the header pipe at low pressures and flows down slope to the water. On porous sediments, water flows through the substrate, pushing loose oil ahead of it, or floating oil to the water's surface and transporting the oil down the slope for pickup. On saturated, fine- grained sediments, the technique becomes more of a flushing of the surface.

Applicable Habitat Types: All shoreline types where the equipment can be effectively deployed. This is non-effective in steep intertidal areas.

When to Use: In heavily oiled areas when the oil is still fluid and adheres loosely to the substrate, and where oil has penetrated gravel sediments. This method is frequently used with other washing techniques (low- or high- pressure, cold-to-hot-water flushing).

Biological Constraints: Special care should be taken to recover oil where nearshore habitats contain rich biological communities. Not appropriate for muddy substrates.

Environmental Effects: Habitat may be physically disturbed by foot traffic during operations and smothered by sediments washed down the slope. Oiled sediment may be transported to shallow, nearshore areas, contaminating them and burying benthic organisms.

Waste Generation: Depends on the effectiveness of the collection method.

Low-Pressure, Ambient-Water Flushing

Objective: To remove fluid oil that has adhered to the substrate or man-made structures, pooled on the surface, or become trapped in vegetation.

Description: Ambient-temperature water is sprayed at low pressures (<10 psi), usually from hand-held hoses, to lift oil from the substrate and direct it to the water's edge for recovery by skimmers, vacuum, or sorbents. Can be used with a flooding system to prevent released oil from re-adhering to the substrate down-stream of the treatment area.

Applicable Habitat Types: On substrates, riprap, and solid man-made structures, where the oil is still fluid. In wetlands and along vegetated banks where oil is trapped in vegetation.

When to Use: Where fluid oil is stranded onshore or floating on shallow intertidal areas.

Biological Constraints: May need to restrict use so that the oil/water effluent does not drain across sensitive, intertidal habitats and mobilized sediments do not affect rich sub tidal communities.

Environmental Effects: If containment methods are not sufficient, oil and oiled sediments may be flushed into offshore areas. Some trampling of substrate and attached biota will occur.

Waste Generation: Depends on the effectiveness of the collection method.

High-Pressure, Ambient-Water Flushing

Objective: To remove oil that has adhered to hard substrates of man-made structures.

Description: Similar to low-pressure flushing except that water pressure is 100- 1,000 psi. High-pressure spray will more effectively remove sticky or viscous oils. If low-water volumes are used, sorbents are placed directly below the treatment area to recover oil.

Applicable Habitat Types: On bedrock, man-made structures, and gravel substrates.

When to Use: Use when low-pressure flushing is not effective at removing adhered oil that must be removed to prevent continued oil release or for aesthetic reasons. Use when a directed water jet can remove oil from hard-to- reach sites.

Biological Constraints: May have to restrict flushing so that the oil does not drain across sensitive habitats. Flushed oil must be recovered to prevent further oiling of adjacent areas. Attached animals and plants in the direct spray zone will be removed.

Environmental Effects: May drive oil deeper into the substrate or erode shorelines of fine sediments if water jet is improperly applied. If containment methods are not sufficient, oil and oiled sediments may be flushed into offshore areas. Some trampling of substrate and attached biota will occur.

Waste Generation: Depends on the effectiveness of the collection method.

Low-Pressure, Hot-Water Flushing

Objective: To remove non-fluid oil that has adhered to the substrate or man- made structures or pooled on the surface.

Description: Hot water (90.F up to 170.F) is sprayed with hoses at low pressures (<10 psi) to liquefy and lift oil from the substrate and direct it to the water's edge for recovery by skimmers, vacuums, or sorbents. Used with flooding to prevent released oil from re-adhering to the substrate.

Applicable Habitat Types: On bedrock, sand to gravel substrates, and man- made structures.

When to Use: Where heavy, but relatively fresh oil is stranded onshore. The oil must be heated above its pour point, so it will flow. This is less effective on sticky oils.

Biological Constraints: Avoid wetlands or rich intertidal communities so that hot oil/water effluent does not contact sensitive habitats. Operations from boats will help reduce foot traffic in soft substrates and vegetation. Flushed oil must be recovered to prevent further oiling of adjacent areas.

Environmental Effects: Hot-water contact can kill all attached animals and plants. If containment methods are not sufficient, oil may be flushed into downstream areas. Some trampling of substrate and biota will occur.

Waste Generation: Depends on the effectiveness of the collection method.

High-Pressure, Hot-Water Flushing

Objective: To mobilize weathered and viscous oil strongly adhered to surfaces.

Description: Hot water (90 degrees F [30 degrees C] up to 170 degrees F [70 degrees C]) is sprayed with hand-held wands at pressures greater than 100 psi (720 kpa). If used without water flooding, this procedure requires immediate use of vacuum or sorbents to recover the oil/water runoff. When used with a flooding system, the oil is flushed to the water surface for collection by skimmers, vacuum, or sorbents.

Applicable Habitat Types: Gravel substrates, bedrock, and man-made structures.

When to Use: When oil has weathered to the point that warm water at low pressure no longer effectively removes oil. Use to remove viscous oil from man- made structures for aesthetic reasons.

Biological Constraints: Use should be restricted so that the oil/water effluent does not drain across sensitive habitats (damage can result from exposure to oil, oiled sediments, and hot water). Should not be used directly on attached algae nor rich, inter-tidal areas. Released oil must be recovered to prevent further oiling of adjacent areas.

Environmental Effects: All attached animals and plants in the direct spray zone will be removed or killed, even when used properly. Oiled sediment may be transported to shallow near-shore areas, contaminating them and burying benthic organisms.

Waste Generation: Depends on the effectiveness of the collection method.

Steam Cleaning

Objective: To remove heavy residual oil from solid substrates or man-made structures.

Description: Steam or very hot water (171 degrees F [77 degrees C] to 212 degrees F [100 degrees C]) is sprayed with hand-held wands at high pressure (2000+ psi [14,400 kpa]). Water volumes are very low compared to flushing methods.

Applicable Habitat Types: Man-made structures such as seawalls and riprap. When to Use: When heavy oil residue must be removed for aesthetic reasons, and when hot-water flushing is not effective, and no living resources are present.

Biological Constraints: Not to be used in areas of soft substrates, vegetation, or high biological abundance directly on, or below, the structure.

Environmental Effects: Complete destruction of all organisms in the spray zone. Difficult to recover all released oil.

Waste Generation: Depends on the effectiveness of the collection method. Usually sorbents are used, generating significant waste volumes.

Sand Blasting

Objective: To remove heavy residual oil from solid substrates or man-made structures.

Description: Use of sandblasting equipment to remove oil from the substrate may include recovery of used (oiled) sand in some cases.

Applicable Habitat Types: On heavily oiled bedrock, artificial structures such as seawalls and riprap.

When to Use: When heavy oil residue must be cleaned for aesthetic reasons and even steam cleaning is not effective.

Biological Constraints: Not to be used in areas of soft substrate, vegetation, or high biological abundance directly below, or adjacent to, the structures.

Environmental Effects: Complete destruction of all organisms in the blast zone. Possible smothering of downstream organisms, unrecovered, and used sand will introduce oiled sediments into the adjacent habitat.

Waste Generation: Will need to recover and dispose of oiled sand used in blasting.

Dry Ice Blasting

Objective: To mobilize weathered and viscous oil strongly adhered to hard surfaces.

Description: Similar to other forms of media blasting, Dry Ice blasting uses small, solid particles of dry ice as the cleaning media. The frigid temperature of the dry ice -109.3°F or -78.5°C "blasting" against the material to be removed, causes it to shrink and lose adhesion from its sub surface. Dry ice blasting media non-abrasive and is sprayed with hand-held wands with blasting pressures from 20 – 300 psi. Only the removed product must be disposed of, as the dry ice sublimes into the atmosphere after blasting.

Applicable Habitat Types: Rocks, bedrock, rip-rap and man-made structures or equipment.

When to Use: When oil has weathered to the point that hot water at high pressure no longer effectively removes oil.

Biological Constraints: Use should be restricted so that the removed oil does not contaminate sensitive habitats (damage can result from exposure to oil and oiled sediments). Should not be used directly on attached algae nor in rich, inter-tidal areas. Released oil must be recovered to prevent further oiling of adjacent areas.

Environmental Effects: All attached animals and plants in the direct spray zone will be removed or killed, even when used properly.

Waste Generation: Depends on the effectiveness of the collection method.

3230.2 Storage

See section **3220.2 Storage**.

3240 Disposal

Contaminated soils, dredge spoils, drums, tanks, refuse, water or 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 controlling the disposal of hazardous wastes.

Recovered petroleum products that are not accepted by a refinery or that cannot be recycled must be managed as a waste. Waste classified as hazardous under either the Resource Conservation Recovery Act (RCRA) or state regulations must be transported to a permitted or interim status hazardous waste facility. Hauling of the waste must be done by a state hazardous materials hauler. Prior to removal of the hazardous waste from on-site/temporary storage, a uniform hazardous waste manifest (DHS- 8022A) must be prepared by the generator (e.g., RP) for recovered petroleum and other contaminated materials.

All materials shipped off-site must be transported in compliance with applicable regulations. These include RCRA, 40 CFR Part 262-263, DOT Hazardous Materials Regulations, 49 CFR Part 171-178, and any applicable state regulations. The FOSC should consider the possibility of employing on-site treatment (e.g., incineration, biological treatments, chemical treatments, waste stream treatment methods, etc.). Approved and effective on-site treatment will often eliminate the dilemma affiliated with hauling hazardous waste to a hazardous waste facility.

Crude oil spilled to marine waters, recovered, and transported to a refinery may be considered a product and may not be subject to hazardous waste management regulations. Refined petroleum products that are recovered from marine waters may also be handled as a product if they can be used for their originally intended purpose (i.e., fuel, fuel oil, etc.).

3240.1 Waste Management and Temporary Storage Options

One of the major issues associated with an oil spill response is the proper management of the recovered petroleum product, as well as the contaminated cleanup materials, soil, and debris. How these are managed is dependent on how they are characterized - as either a solid waste, hazardous waste or a hazardous material (used or reused).

Under California law, a hazardous substance released or discharged to marine waters of the state is defined as a waste and must be characterized as either hazardous or nonhazardous and managed accordingly. Once the waste is characterized and its final disposition is determined, the waste may be redefined and managed as a material, rather than a waste.

In managing hazardous wastes, one must also be responsible for adhering to the waste minimization philosophy behind good waste management practices. Waste generation and disposal can be minimized through proper waste characterization, handling, segregation, treatment, and recycling; while only solid, non-recyclable wastes are actually "disposed" of.

The following waste management hierarchy should always be used in the management of both hazardous and nonhazardous wastes:

1. Eliminate or minimize the amount of waste generated
2. Source reduction

3. Use and reuse as a material
4. Reclaim or recycle
5. Treatment
6. Disposal

Dispose of waste only if the above priorities are not feasible. The need to minimize the volume and toxicity of all hazardous wastes has been made clear and explicit in state and federal regulations; however, other reasons to minimize waste would include protection of public health and the environment, as well as economic incentives, liability incentives, and public relations incentives.

Refer to the Waste Management Plan (template).

3240.2 Decanting Policy

Oil recovered at sea typically contains significant amounts of seawater. In order to maintain the efficiency of the skimming process this water must be separated/decanted from the oil and discharged back to the ocean during recovery operations. Separated sea water typically contains elevated levels of hydrocarbons and thus the discharge of this material may constitute a discharge of a pollutant; therefore, in 1995, a Memorandum of Understanding (MOU) had been entered by the State Waters Resource Control Board (SWRCB) and OSPR which addresses all permits and requirements pertaining to the incidental discharge of wastewater during oil spill response activities. The MOU finds that these discharges are exempt from the regulation under a National Pollution Discharge Elimination System (NPDES) permit. Additionally, the MOU also provides that the SWRCB will recommend that the coastal Regional Water Quality Control Board (RWQCB) waive the issuance of waste discharge requirements for these types of discharges.

The "discharge" of separated/decanted water is recognized by the Federal On-Scene Commander (FOSC) as an integral part of offshore skimming operations and as an excellent waste minimization tool. The FOSC or designee, therefore, may authorize the discharge of separated/decanted water back into the sea within the catenary area of a boom/skimming system outside of State waters (3 miles), in accordance with the MOU between SWRCB and OSPR. The exception to this will be in NOAA Marine Sanctuary waters. Federal law prohibits the discharge of material, such as separated water, to marine sanctuaries unless permitted by the Administrator of the sanctuary program. The phone numbers for the Sanctuary field offices are as follows: Channel Islands (805) 966-7107; and Farallones and Cordell Book @ (415) 556-3509.

3240.3 Sample Waste Management Plan

Waste Management Plan (template)

3250 Decontamination

Personnel, vehicles, vessels, etc. responding to hazardous substance incidents may become contaminated in a number of ways. This includes contact vapors, gases, or particulates in the air; being splashed by materials while sampling, walking through puddles of liquid or contaminated

soil; or through using/handling contaminated equipment. Decontamination consists of physically removing contaminants or changing their chemical nature to innocuous substances. How extensive decontamination must be depends on several factors, the most important being the type of contaminated personnel, equipment, etc. involved.

The Decontamination Group is responsible for decontamination of personnel and equipment. Contaminated personnel entering contaminated areas shall be decontaminated in accordance with the Site Safety Plan. The following "minimum" actions shall be performed:

- Direct and coordinate decontamination activities,
- Determine resource needs, and
- Brief SOFR on conditions.

A personnel decontamination plan should be developed as part of the Site Safety Plan. The initial decontamination plan is based on a worst-case situation or assumes no information is available about this incident. Specific conditions (e.g., type of contaminant, amount of contamination, levels of protection required, type of protective clothing worn) are then evaluated, and the initial decontamination plan is modified to adapt as new information about site conditions becomes available. All materials and equipment used for decontamination must be disposed of properly (i.e., as waste). In addition to routine decontamination procedures, emergency decontamination procedures must be established. In an emergency, the primary concern is to prevent loss of life and severe injury to site personnel. If immediate medical treatment is required to save a life, decontamination should be delayed until the victim is stabilized. If decontamination can be performed without interfering with essential life-saving techniques or first aid, or if a worker has been contaminated with an extremely toxic or corrosive material that could cause severe injury or loss of life, decontamination must be performed immediately. During an emergency, provisions must also be made for protecting medical personnel and disposing of contaminated clothing and equipment. Contaminated debris including organic material, contaminated cleanup equipment (i.e., PPE, sorbents, booms, etc.) and other contaminated materials that cannot be recycled must be managed as a waste. The materials must also be characterized before the appropriate waste management option is determined.

3250.1 Decontamination Plan

A decontamination plan should be developed (as part of the Site Safety Plan) and set up before any personnel or equipment may enter areas where the potential for exposure to hazardous substances exists. The decontamination plan should:

- Determine the number and layout of decontamination stations.
- Determine the decontamination equipment needed.
- Determine appropriate decontamination methods.
- Establish procedures to prevent contamination of clean areas.
- Establish methods and procedures to minimize worker contact with contaminants during removal of personal protective clothing and equipment (PPE).

- Establish methods for disposing of clothing and equipment that are not completely decontaminated.

The plan should be revised whenever the type of personal protective clothing or equipment changes, the site conditions change, or the site hazards are reassessed based on new information.

Refer to the sample Decontamination Plan on Homeport in the Port Directory on the Sector Los Angeles-Long Beach site.

3260 Dispersants

The *California Dispersant Use Plan* is maintained on the California Department of Fish & Wildlife Office of Spill Prevention & Response website. The plan details the agencies, authorities, and process involved in making a dispersant use decision in U.S. and State waters. For more information about the *California Dispersant Use Plan*, contact Ms. Ellen Faurot-Daniels at the California Office of Spill Prevention & Response, ellen.faurot-daniels@wildlife.ca.gov; (831) 649-2888.

California Dispersant Use Plan

The most common technique for removing spilled oil from marine surface waters involves mechanical skimming devices, which typically removes less than 20% of the spilled petroleum. The second most considered method is the use of chemical agents (*e.g.*, dispersants) to disperse oil into the water column. The effectiveness of this approach can range from zero to 100 percent, depending on the type of petroleum spilled, the dispersant used, oceanographic conditions, and the approach employed to estimate effectiveness.

While moving dispersed oil into the water column does not alleviate the risk of impacts to that environment, it does have the potential to accelerate cleanup of spilled oil on the water surface and at the same time reduce the environmental risk of oil related impacts on more environmentally sensitive areas and species.

3260.1 Dispersant Options

It is expected that the RRT will also require that any subsurface use of dispersants, or a surface use extending beyond 96 hours, will also need to come to the RRT for their incident- specific approval.

Only dispersants that are on the federal NCP Product Schedule and licensed by the State of California may be used. Conditions of dispersant use apply, even within the pre-approval zone. These and other recommended practices and processes are detailed in full in the California Dispersant Use Plan.

Dispersant use decisions (as well as other ART decisions) are run under the Environmental Unit in Planning, facilitated by the OSPR ART Technical Specialist and, as available, the NOAA SSC. Both are members of the Region IX RRT, and will be the primary persons tasked

with working through the dispersant use flowcharts and checklists, and briefing the FOSC/UC and RRT with their recommendations.

3260.2 Dispersant Checklists

Dispersant checklists are contained within the Dispersant Use Plan for California.

California Dispersant Use Plan

3260.3 Preauthorized Zones

RRT IX Dispersant Use Policy

1. Dispersant Pre-Approval Zones.
   All waters 3-200 nm from any shoreline except those within a National Marine Sanctuary, or within 3 nm of the California/Mexico border. **This pre-approval is only extended by the RRT to the Federal On-Scene Coordinator (FOSC).**

2. RRT Incident-Specific Approval.
   Required for all other waters (e.g., within state waters, including bays and estuaries, and within 3 nm of the California/Mexico border).

3260.4 Dispersant Response Plan Worksheet

Refer to the California Dispersant Use Plan.

3260.5 SMART Protocol

Dispersant effectiveness is difficult to predict in advance due to the many controlling variables (*e.g.*, type and weathered state of the spilled oil, the dispersant used, sea state, application efficiency). The use of SMART (Specialized Monitoring of Applied Response Technologies) is part of the *California Dispersant Use Plan*, and will be used as appropriate during real spills to estimate the effectiveness of a dispersant application, and to make informed decisions about whether continued application is warranted.

3260.6 Types of Equipment Required

Refer to the California Dispersant Use Plan.

3270 ISB

The *On-Water In-Situ Burn Plan for California* is maintained on the California Department of Fish & Wildlife Office of Spill Prevention & Response website and details in full the agencies, authorities, and process involved in making an in-situ burn use decision in US and State waters.

California On-Water In-Situ Burn Plan

IN-SITU BURNING

Objective: To remove oil from the water surface or habitat by burning it in place. Description: Oil floating on the water surface is collected into slicks at least 2-3 mm thick and ignited. The oil can be contained in fire-resistant booms, or by natural barriers such as ice or the shore. On land, oil can be burned when it is on a combustible substrate such as vegetation, logs, and other debris. Oil can be burned from non-flammable substrates using a burn promoter. On sedimentary substrates, it may be necessary to dig trenches for oil to accumulate in pools to a thickness that will sustain burning. Heavy oils are hard to ignite but can sustain a burn. Emulsified oils may not ignite nor sustain a burn when the water content is greater than 30 to 50 percent.

When to Use: On most habitats except dry muddy substrates where heat may impact the biological productivity of the habitat. Burning m ay increase oil penetration into permeable substrates. Use in marshes should be undertaken using special precautions. Not suitable for woody vegetation such as mangroves and hardwood swamps.

Applicable Habitat Types: On land, where there is heavy oil in sites neither amenable nor accessible to physical removal and it is important to remove the stranded oil quickly. In wetlands and mud habitats, a water layer will minimize impacts to sediments and roots. Burning has m any potential applications for spills in ice. There are many operational and public health limitations.

Biological Constraints: The possible effect of smoke on wildlife and populated areas should be evaluated.

Environmental Effects: Temperature and air quality effects are likely to be localized and short-lived. Toxicological impact from burn residues has not been evaluated. On-water, burn residues are likely to sink. On land, removal of residues is often necessary for crude and heavy oils. Limited data on burning oiled wetlands indicate recovery of wetland vegetation will depend on season of burn, type of vegetation, and water level in the marsh at time of burn.

Waste Generation: Any residues remaining after burning will need to be collected and land-filled, but with an efficient burn will be a small fraction of the original oil volume.

3270.1 ISB Options

During a spill, in-situ burn use decisions (as well as other ART decisions) are run under the Environmental Unit in Planning, facilitated by the OSPR ART Technical Specialist and, as available, the NOAA SSC. Both are members of the Region IX RRT, and will be the primary persons tasked with working through the in-situ burn use flowcharts and checklists, and briefing the UC and RRT with their recommendations. If a decision is made to conduct an in-situ burn, a Liaison position between Planning and Operations will be established to facilitate some operational aspects of that decision, with a focus on ensuring that all conditions of in-situ burn use are being met, and all Best Management Practices, effective monitoring, air and water sampling, wildlife monitoring, etc., are incorporated and used, as appropriate to each incident.

3270.2 ISB Checklists

Refer to the California On-Water In-Situ Burn Plan.

3270.3 Preauthorized Zones

The RRT has approved two types of in-situ burn use zones in California:

1. RRT In-situ Burn Pre-Approval Zone.

All waters 35-200 nm from any California shoreline. This pre-approval is only extended by the RRT to the On-Scene Coordinator (OSC). This Pre-Approval is conveyed in a Letter of Agreement among the Coast Guard, EPA, NOAA and DOI, and may be found in its entirety in Appendix XIII of the RCP.

2. RRT Incident-Specific Approval.

Required for all other California waters (e.g., 3-35 nm from shore, and within state waters, including bays and estuaries), and on land. A case-by-case checklist for RRT in-situ burn approval, as well as other decision support material, is in Appendix XIII of the RCP.

3270.3 Types of Equipment Required

Refer to the California On-Water In-Situ Burn Plan.

3280 Bioremediation/Oil Spill Cleanup Agents

Bioremediation is a treatment technology that enhances existing biological processes to accelerate the decomposition of petroleum hydrocarbons and some hazardous wastes. Bioremediation has been used extensively in wastewater treatment of spilled oil. Research suggests that shoreline treatment by nutrient enhancement significantly increases degradation rates of oil, compared to untreated shoreline areas.

The prospect of bioremediation providing increased rates of oil degradation with minimal input of human effort is attractive. However, the technology is time consuming, unproven in open water environments, and probably best suited for the treatment of stranded oil on specific types of shorelines and in marsh habitats. Bioremediation should be viewed as a polishing agent for the final stages of cleanup rather than as a primary response tool, especially considering the slow rates of reaction to degrade the oil.

RRT IX policy states that bioremediation should be used strictly as a shoreline remediation tool with a preference for nutrient enhancement and without the introduction of indigenous and/or non-indigenous microbes.

Only bioremediants that are on the federal NCP Product Schedule and licensed by the State of California may be used.

During a spill, decisions involving the use of bioremediation (as well as other ART decisions) are run under the Environmental Unit in Planning, facilitated by the OSPR ART Technical Specialist and, as available, the NOAA SSC. Both are members of the Region IX RRT and will be the primary persons tasked with working through the bioremediation flowcharts and checklists and briefing the UC and RRT with their recommendations.

Nutrient Enrichment (Biostimulation)

Objective: To accelerate the rate of oil hydrocarbon degradation due to natural microbial processes using a form of bioremediation that adds nutrients (generally nitrogen and phosphorus) that stimulate microbial growth. If nutrients are a limiting factor (as measured using the interstitial pore water) in an area where shoreline oiling has occurred, water-soluble nutrients can be applied by a spray irrigation system.

Description: Nutrients should be applied daily if the impacted area gets completely submerged by tides and waves and if maximum biostimulation is desired. If the impacted area gets submerged only during spring tides, the frequency of nutrient addition will be determined by the intertidal zone water coverage. Using slow-release granular or encapsulated nutrients or oleophilic fertilizer (which adheres to the oil residue on the surface) should require less frequent addition, but time-series monitoring of interstitial pore water nutrient levels is needed to ensure target levels are being maintained, especially throughout the depth of the impacted intertidal zone.

When to Use: Any shoreline habitat type where access is allowed, and nutrients are deficient.
Applicable Habitat Types: On moderate to heavily oiled substrates, after other techniques have been used to remove free product on lightly oiled shorelines, where other techniques are destructive or ineffective; and where nutrients limit natural attenuation. Most effective on light to medium crude oils and fuel oils (asphaltenes tend to inhibit rapid biodegradation). This method is less effective where oil residues are thick. Not considered for gasoline spills, which evaporate rapidly.

Biological Constraints: Avoid using ammonia-based fertilizers at highly elevated concentrations because un-ionized ammonia is toxic to aquatic life. Nitrate is an equally good nitrogen source, minus the toxicity. Sodium tripolyphosphate is a better phosphorus source than orthophosphates because it is more soluble in seawater. If nutrients are applied properly with adequate monitoring, eutrophication should not be a problem. Only nutrient additives proven to be nontoxic and effective in either the laboratory or the field should be used in the environment. Contact toxicity of oleophilic nutrients may restrict their use as other chemicals in the product could be more toxic to aquatic organisms in the presence of oil.

Environmental Effects: Detrimental effects to shoreline from foot or vehicle traffic caused by workers applying nutrients (unless nutrients are sprayed from a vessel or aircraft).

Waste Generation: None.

Natural Microbe Seeding (Bioaugmentation)

Objective: To accelerate natural microbial degradation of oil by using a form of bioremediation that adds high numbers of oil-degrading microorganisms.

Description: Formulations containing specific hydrocarbon-degrading microbes are added to the oiled area because indigenous hydrocarbon degraders are low in number, or those that are present cannot degrade the oil effectively. Since microbes require nitrogen and phosphorus to convert hydrocarbons to biomass, formulations containing these oil degraders must also contain adequate nutrients. Research studies conducted with bioengineered organisms or organisms enriched from different environments, grown in the laboratory to high numbers, and applied to an oiled beach to stimulate rapid biodegradation, have failed to prove conclusively that seeding is effective.

Bioaugmentation appears less effective than biostimulation because: 1) hydrocarbon degraders are ubiquitous in nature and, when an oil spill occurs at a given site, the influx of oil will cause an immediate increased response in the hydrocarbon degrading populations; but, 2) if nutrients are in limited supply, the rate of oil biodegradation will be less than optimal; thus, 3) supplying nutrients will enhance the process initiated by the spill, but adding microorganisms will not, because they still lack the necessary nitrogen and phosphorus to support growth.

Applicable Habitat Types: There is insufficient information on impact or effectiveness of this method to make a judgment on applicable habitat.

When to Use: There is insufficient information on impact or effectiveness of this method to make a judgment on when to use it.

Biological Constraints: Avoid using products containing ammonia-based fertilizers at elevated concentrations because un-ionized ammonia is toxic to aquatic life. Nitrate is an equally good a nitrogen source, minus the toxicity. If the product containing nutrients is applied properly with adequate monitoring, eutrophication should not be a problem; but, toxicity tests should be evaluated carefully, as other chemicals in the product could be toxic to aquatic organisms. Environmental Effects: Detrimental physical effects to shoreline from foot or vehicle traffic caused by workers applying bioaugmentation products (unless nutrients are sprayed from a vessel or aircraft).

Waste Generation: None.

Solidifiers

Objective: To change the physical state of spilled oil from a liquid to a solid.

Description: Chemical agents (polymers) are applied to oil at rates of 10-45 percent or more, solidifying the oil in minutes to hours. Various broadcast systems, such as leaf blowers, water cannons, or fire suppression systems, can be modified to apply the product over large areas. Solidifiers can be applied to both floating and stranded oil. Solidifiers can be placed in booms, pillows, sausages, etc. and used like sorbents, although this type of solidifier application has not been used operationally.

Applicable Habitat Types: All water environments, bedrock, sediments, and artificial structures.

When to Use: When immobilization of the oil is desired, to prevent refloating from a shoreline, penetration into the substrate, or further spreading. However, the oil may not fully solidify unless the product is well mixed with the oil and may result in a mix of solid and untreated oil. Generally not used on heavy oil spills, which are already viscous.

Biological Constraints: Must be able to recover all treated material. Environmental Effects: Available products are insoluble and have very low aquatic toxicity. Unrecovered solidified oil may have longer impact because of slow weathering rates. Physical disturbance of habitat is likely during application and recovery.

Waste Generation: If skimming efficiency is increased, solidifiers may reduce the volume of water collected during oil recovery. Effects on recycling oil treated with solidifiers are unknown. Most solidifier producers state that treated oil can pass leachate tests, allowing disposal in landfills.

Shoreline Cleaning Agents (Surface Washing Agents)

Objective: To increase the efficiency of oil removal from contaminated substrates.

Description: Special formulations are applied to the substrate, as a presoak and/or flushing solution, to soften or lift weathered or heavy oils from the substrate to enhance flushing methods. The intent is to lower the water temperature and pressure required to mobilize the oil from the substrate during flushing. Some agents will disperse the oil as it's washed off the beach, others will not.

Applicable Habitat Types: On any habitat where water flooding and flushing procedures are applicable.

When to Use: When the oil has weathered to the point where it cannot be removed using ambient water temperatures and low pressures. This approach may be most applicable where flushing effectiveness decreases as the oil weathers.

Biological Constraints: When the product does not disperse the oil into the water column, the released oil must be recovered from the water surface. Use may be restricted where suspended sediment concentrations are high, near wetlands, and near sensitive near shore resources.

Environmental Effects: The toxicity and effects on dispersability of treated oil vary widely among products. Selection of a product should consider the toxicity of the product.

Waste Generation: Because treated oil must be recovered, waste generation is a function of recovery method, which often includes sorbents.

3230.3 Pre-Beach Cleanup

While it is generally not possible to avoid the generation of oily debris resulting from the contact of floating oil with waterborne solids, it is possible to avoid the generation of oily debris in the coastal inter-tidal zone if the anticipated area of oil impact can be cleaned prior to stranding of the spilled oil. Personnel can be deployed to remove debris from beach intertidal areas to above the high tide line to prevent oiling of stranded debris/trash. It is important to note that such crews are not likely to be certified as required for oiled debris recovery under OSHA, 29 CFR Part 1910.120 and can only perform this task prior to the stranding of spilled oil. A safety/industrial hygiene specialist should be consulted regarding limitations of these crews and the effective establishment of exclusion zones in the area of beach impact.

3300 EMERGENCY RESPONSE

The highest priority response objective is the protection of public health and welfare including the safety of response personnel. Protection of the public welfare, including critical infrastructure and natural resources are critical objectives but subordinate to public and responder safety.

3310 Search and Rescue (SAR)

The Search and Rescue (SAR) group is responsible for prioritization and coordination of all Search and Rescue missions directly related to a specific incident. All search and rescue operations will be coordinated through the Sector Los Angeles-Long Beach Operations Center.

For SAR assistance, please call USCG Sector LA/LB CDO at **310-521-3801**.

Search and Rescue (SAR) efforts primarily focus on finding and assisting persons in actual or apparent distress.

3310.1 SAR Area Resources

Search and Rescue resources may be provided by local U.S. Coast Guard units and/ or county and local fire/lifeguards, law enforcement agencies, or other agency with jurisdiction and capabilities.

3320 Salvage/Source Control

The primary objective in any salvage scenario, whether a single event casualty or combination of casualties, is to minimize the risk to human health, the environment, and property. The following six types of casualties are listed in order of frequency: Hull or Machinery Damage, Stranding or Grounding, Collision, Fire and Explosion, Allision, Stress Fractures. Common to all casualties is a need for the quick and substantial allotment of response resources. The Unified Command will set the objectives of a vessel casualty response. Early dissemination of an accurate assessment of the vessel's condition and deployment of appropriate response resources is essential.

Refer to the 2021 Marine Firefighting Contingency Plan.

3320.1 Assessment and Survey

The evaluation and interpretation of information gathered from a variety of sources (including weather information and forecasts, computerized models, GIS data mapping, remote sensing sources, ground surveys, etc.) that, when communicated to emergency managers and decision makers, can provide a basis for incident management decision making.

3320.2 Stabilization

Refer to the 2021 Marine Firefighting Contingency Plan.

3320.3 Specialized Salvage Operations

Refer to the 2021 Marine Firefighting Contingency Plan.

3320.4 Types of Equipment Required

Refer to the 2021 Marine Firefighting Contingency Plan.

3320.5 Salvage Guidelines

Once enough information has been gathered to proceed with a decisive action plan, the USCG Operational Commander, IC or UC will set forth the operational period objectives. These objectives may include but are not limited to:

- Evacuate crew
- Control vessel movement
- Get response personnel and equipment on-scene
- Extinguish shipboard fire
- Stop/slow flooding
- Stop/slow vessel movement toward potential hazards
- Contain pollution
- Identify suitable port of refuge
- Create a salvage plan
- Mitigate potential impacts of the casualty on other vessel traffic and port activities
- Evaluate risk to public- i.e., hazardous material release, air quality, etc.

Refer to the 2021 Marine Firefighting Contingency Plan.

3330 Marine Fire Fighting

The Coast Guard has traditionally provided firefighting equipment and training to protect its vessels and property. Commanding Officers of Coast Guard units (COTP's, Groups, Cutters, Stations) are routinely called upon to provide assistance at fires on board vessels and at waterfront facilities. Although the Coast Guard clearly has an interest in fires involving vessels or waterfront facilities, local authorities are principally responsible for maintaining the necessary firefighting capabilities within U.S. ports and harbors. Additionally, a vessel/facility's owner and/or operator is ultimately responsible for the overall safety of vessels/facilities under their control, including ensuring adequate firefighting protection.

Refer to the 2021 Marine Firefighting Contingency Plan.

3340 HAZMAT

Under the direction of the Emergency Response Branch Director, the HAZMAT Group Supervisor is responsible for coordinating and directing all hazardous materials activities related to the incident.

1. Prioritize HAZMAT responses related to the incident.
2. Determine resource requirements.
3. Direct and coordinate HAZMAT responses.
4. Manage dedicated HAZMAT resources.
5. Brief Emergency Response Branch Director on activities.

3340.1 Initial Emergency Response Procedures

Refer to Section 7000 Hazardous Substances.

3340.2 Evacuation Procedures

Refer to Section 7000 Hazardous Substances.

3340.3 HAZMAT POCs

Refer to Section 7000 Hazardous Substances.

3340.4 Types of Equipment required

Refer to Section 7000 Hazardous Substances.

3350 Emergency Medical Services (EMS)

Under the direction of the Emergency Response Branch Director, the EMS Group Supervisor is responsible for coordinating and directing all emergency medical services related to the incident.

1. Prioritize EMS responses related to the incident.
2. Determine resource requirements.
3. Direct and coordinate EMS responses.
4. Manage dedicated EMS resources.
5. Brief Emergency Response Branch Director on activities.

3350.1 EMS

Private Emergency Medical Services are listed in Section 9240.10 of the Appendix.

3360 Law Enforcement

Under the direction of the Emergency Response Branch Director, the Law Enforcement Group Supervisor is responsible for coordinating and directing all law enforcement activities, related to the incident, which may include, but not limited to, isolating the incident, crowd control, traffic control, evacuations, beach closures, and/or perimeter security.

1. Determine resource needs.
2. Direct and coordinate law enforcement response.
3. Manage dedicated law enforcement resources.
4. Manage public protection action; e.g., evacuations, beach closures.

Law Enforcement contact information is listed in Section 9230.4 Law Enforcement.

3360.1 Perimeter/Crowd/Traffic/Beach Control

Perimeter/Crowd/Traffic/Beach Control if needed should be coordinated with local law enforcement authorities and may be augmented or replaced with contract security for protracted responses.

3360.2 Safety/Security Zones

Security/Safety Zones will be coordinated by the Sector LA-LB Command Center in accordance with 33 CFR 165 Subparts C and D.

3400 AIR OPS

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3410 Air Tactical

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3410.1 Aerial Surveillance

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3410.2 Aerial Dispersant Application

Refer to the California Dispersant Use Plan.

3410.3 Procedures for Temporary Flight Restrictions

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3410.4 Permanent Area Restrictions

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3420 Air Support

3420.1 Airports/Helibases

Refer to Volume II, Section 9800 of the Appendix.

3420.2 Helospots

Refer to Volume II, Section 9800 of the Appendix.

3420.3 List of Certified Helos/Aircraft Providers

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3420.4 Fuel/Maintenance Sources

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3420.5 Air Traffic Control Procedures

Refer to Section 3400 of the Region IX Regional Contingency Plan.

3500 STAGING AREAS

3510 Pre-Identified Staging Areas

Staging areas for equipment: the appropriate staging area is typically spill specific. However, there are considerations, which need to be applied each time a staging area is selected. Preliminary list of these considerations (not all inclusive):

(a) Accessibility (e.g. vehicles, trailers, boats, etc.);

(b) Proximity to spill;

(c) Proximity to a sensitive environmental site (California Department of Fish and Wildlife - OSPR and trustees MUST be consulted);

(d) Potential temporary command post site and/or availability of existing facilities;

(e) Accessibility to power, phone lines, and water;

(f) Availability of site (i.e. is site privately owned, regulatory prohibitions, etc.);

Refer to Volume II, Section 9800 of the Appendix.

3520 Security

Refer to Section 3360 Law Enforcement.

3600 WILDLIFE

The Wildlife Response Plan for Oil Spills in California is located on the California Department of Fish and Wildlife website at: Wildlife Response Plan.

Wildlife and habitats are put at risk or injured when oil is spilled into the environment. Both Federal and State statutes mandate protection, rescue and rehabilitation of oiled wildlife.

The federal Oil Pollution Act of 1990 (OPA 90) requires Area Contingency Plans contain a Fish and Wildlife and Sensitive Environments protection plan and include immediate and effective protection, rescue and rehabilitation of wildlife resources and habitat that are harmed by a spill.

The State of California's Lempert-Keene-Seastrand Oil Spill Prevention and Response Act requires the development of contingency plans for the protection of fish and wildlife, funding for a network of rescue and rehabilitation facilities, assessment of injuries to natural resources, and restoration plans to compensate for adversely affected wildlife resources and habitats.

To address these statutory mandates, the Wildlife Response Plan for Oil Spills in California has been developed by a group of federal and state agencies and other interested parties.

The Wildlife Response Plan for Oil Spills in California details the Wildlife Branch purposes, goals, objectives, responsibilities, and structure. The Wildlife Branch is in the Operations Section of the Incident Command System (ICS) for oil spill response. The Wildlife Branch structure is described in the USCG Incident Management Handbook. As is always true with the ICS, the structure may be expanded or contracted to fit the need, but the mission remains unchanged.

The principal objectives of the Wildlife Branch during oil spill response are:

- Protect wildlife and habitats from contamination
- Minimize injuries to wildlife and habitats from contamination
- Minimize injuries to wildlife from the cleanup
- Provide best achievable capture and care for injured wildlife
- Document adverse effects to wildlife that result from the spill and cleanup

California DFW OSPR staff will assume the role of Wildlife Branch Director during a spill response. This is a natural consequence of the pivotal position of OSPR because they are the lead state trustee agency for California's fish and wildlife, they have formal agreements and permits in place with other agencies, and they have the needed expertise, training, and experience. Within the Wildlife Branch structure for California, there are five Groups who report to the Wildlife Branch Director:

- Wildlife Reconnaissance Group (aerial, ground, and on-water)
- Wildlife Hazing Group (deters wildlife from oiled areas)
- Wildlife Recovery Group (search and collection, live and dead)
- Wildlife Field Stabilization (initial first aid prior to transport)
- Wildlife Care and Processing Group (rehabilitation and logging in)

While the Wildlife Plan was originally designed to cover oil spills in marine waters as required by federal and state law, it is applicable to non-oil spills as well. The organizational structure, roles and responsibilities remain the same, although some functions may be altered, as appropriate.

3610 Fish and Wildlife Protection Options

Refer to the Wildlife Response Plan for Oil Spills in California.

3620 Recovery

Recovery &Transportation of oiled wildlife involves collecting dead and capturing live animals and transporting them to processing centers. Wildlife collection by any agency or organization must be conducted under the direction of the Wildlife Branch Director and the UC. Their activities must comply with agreements and permits from the appropriate management agencies (e.g., CDFW, NOAA- NMFS, and USFWS; see 14 CCR 679(d)).

3620.1 Wildlife Recovery Operations/Procedures

Once animals have become oiled, habitat-specific, and species-specific strategies to recover and remove oiled/debilitated live animals and all dead wildlife are required. Under the direction of the Recovery & Transportation Group Supervisor, systematic surveys for collecting affected wildlife should be carried out several times per day, including at least one survey as early as

is safely possible after dawn. Successful captures not only depend on the condition of the animal, but also on the training and experience of the handler, along with techniques and equipment used.

3620.2 Recovery Processing

The Wildlife Processing Unit ensures oiled animals are fully evaluated and data are captured so the UC can obtain oiled wildlife statistics used for a variety of purposes, such as response strategy development and media updates. Depending on the size of the spill, Live Animal and Dead Animal Strike Teams can be formed to improve triage and stabilization capabilities for the live animals.

3620.3 Carcass Retrieval and Processing

Following processing and documentation, information on wildlife collected including number, type, species, locations, and disposition of oiled wildlife, all dead animals that have had appropriate evidence collected (photos, feather samples and fur/carapace swabs) should be systematically packaged and stored in locked freezers on site until the conclusion of the event.

3630 Wildlife Rehab

Native wildlife in California is protected under a variety of regulations (e.g., DFG code 3500). The Oiled Wildlife Care Network (OWCN) and key OWCN Member Organizations hold Wildlife Rehabilitation Permits issued by the State which allow them to temporarily collect and hold injured wildlife. Non-native restricted species cannot be released or transferred without written permission from CDFW (14 CCR s 671).

3630.1 Wildlife Rehab Operations

In response to the Federal Oil Pollution Act of 1990 (OPA 90), the National Oil and Hazardous Substances Pollution Contingency Plan ("National Contingency Plan" or NCP) update of 1994 stipulates that Area Contingency Plans (ACPs) contain a Fish and Wildlife and Sensitive Environments Plan "in order to provide for coordinated, immediate and effective protection, rescue, and rehabilitation of, and minimization of risk of injury to, fish and wildlife resources and habitat."

3630.2 Rehab Facilities

Facilities within the OWCN shall be established and maintained in a state of preparedness to provide the best achievable treatment for marine mammals and birds affected by an oil spill in marine waters. In the case of cleaned animals that require prolonged time to recover, transport to long-term care facilities may be considered (particularly for marine mammals).

3630.3 Rehab Procedures

Refer to the Wildlife Response Plan for Oil Spills in California.

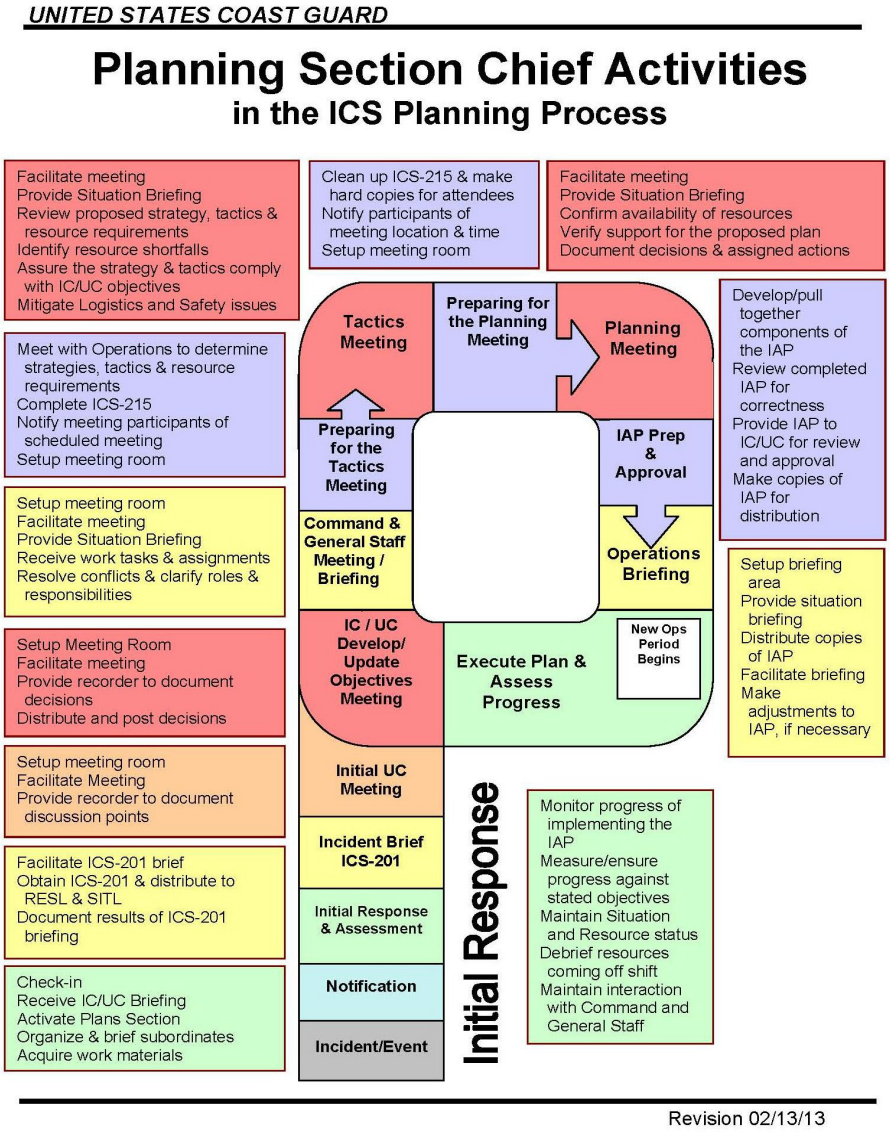
4000 PLANNING

4100 PLANNING SECTION ORGANIZATION

The Planning Section, headed by the Planning Section Chief who is a member of the General Staff, is responsible for the collection, evaluation, and dissemination of tactical information related to the incident, and for the preparation and documentation of Incident Action Plans. The section also maintains information on the current and forecasted situation, and on the status of resources assigned to the incident. Planning includes the Situation, Resource, Documentation, Environmental and Demobilization Units, as well as Technical Specialists.

Refer to the PSC Job Aid.

4110 Planning Section Planning Cycle Guide



4200 SITUATION

The Situation Unit Leader is responsible for the collection and evaluation of information about the current and possible future status of the spill and the spill response operations. This responsibility includes the compilation of information regarding the type and amount of oil spilled, the amount of oil recovered, the oil's current location and anticipated trajectory, and impacts on natural resources. This responsibility includes providing information to the GIS Specialist(s) for the creation of maps to depict the current and possible future situation and the preparation of reports for the Planning Section Chief.

Refer to the Situation Unit Leader Job Aid.

4210 Chart/Map of Area

Charts/Maps can be found in Volume II, Section 9800 of the Appendix.

4220 Weather/Tides/Currents

Weather, tides, and currents is critical information to have for a successful response. National Weather Service subject matter experts can be accessed through the NOAA Scientific Support Coordinator.

4230 Situation Unit Displays

The Situation Unit is responsible for maintaining a display of status boards, which communicate critical incident information vital to establishing an effective command and control environment. The display of incident status information is obtained from Field Observers (FOBS), resource status reports, aerial and other photographs, and infrared data.

Refer to the Coast Guard Incident Management Handbook.

4240 On-Scene Command and Control (OSC2)

Refer to the Coast Guard Incident Management Handbook.

4250 Required Operational Reports

Sectors shall submit a SITREP-POL for any of the following circumstances:

(a) Use of Oil Spill Liability Trust Fund (OSLTF), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) fund (Superfund), or Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) funding for oil or hazardous substance incidents.

(b) Actual or potential medium and major oil spills;

(c) Spills that garner significant media, public, or political interest; or

(d) Any time the FOSC deems necessary.

Sectors shall submit SITREP-POLs via the Coast Guard Command and Control Official Information Exchange (C2OIX) System. Sectors shall copy Commandant as an information addressee as soon as reasonably practicable, but no later than 24 hours after the incident occurs or one of the aforementioned funds is used.

The mandatory message format is located in Appendix L of the Marine Environmental Response Manual, COMDTINST M16000.14A.

4260 Spill Trajectory Estimates

During the initial hours of a response, a simple "back-of-the-envelope" trajectory using local wind and current information (from the National Weather Service, PORTs, SCCOOS, and CeNCOOS), can be an effective tool. As an incident progresses, lasts longer or becomes larger and more complex, computer modeled trajectories will usually provide better guidance. Both approaches represent simplified versions of reality, require reasonable assumptions and rely on regular aerial observations properly characterizing the oil's extent and character (thickness & distribution).

Trajectory estimates are very useful for determining which natural & economic resources most at risk of being impacted from a spill and can help drive response tactics and priorities. Computer simulations are particularly efficient for looking at advanced time intervals (multiple days or tide cycles), as such calculations done by hand would be very time-consuming and could be exceedingly complex.

As soon as possible, spill trajectories should be requested through the National Oceanic & Atmospheric Administration's Scientific Support Coordinator (NOAA SSC) and the following basic information should be provided:

- Incident location (latitude/longitude & description) and time of occurrence
- Oil type and estimated volume released
- Whether the source is secure or still leaking
- Location and time of any oil-on-water observations

If no aerial observations are yet available, the initial NOAA estimate may be in written form. Once overflight observations have occurred, establishing the oil's extent and character on the water's surface, graphic trajectory products are typically provided. Regular spill overflights (once or twice daily) can help verify the accuracy of trajectory estimates and allow them to be updated as needed.

4300 RESOURCES

The Resource Unit Leader (RESL) is responsible for maintaining the status of all assigned tactical resources and personnel at an incident.

Refer to the Resource Unit Leader Job Aid.

4310 Resource Management Procedures

Resource Unit is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and

personnel, maintaining a status-keeping system indicating current location and status of all these resources. Resources shall be managed in accordance with procedures stated in the Coast Guard Incident Management Handbook.

4310.1 Check-in Procedures

All resources are required to check in at the beginning of an event and prior to departing, once his or her services are no longer required. Check in shall be conducted in accordance with the procedures in the Coast Guard Incident Management Handbook.

4320 Volunteers

The Volunteer Coordinator is responsible for managing volunteers which includes the coordination of a volunteer reception process, ensuring volunteers are assigned to appropriate tasks and locations, and that volunteers have been provided PPE and training to safely complete their assigned tasks. When there is significant volunteer participation, a Volunteer Unit (VU) may be required. Volunteer Coordinators should be used to identify volunteer interest, availability, and capabilities and work with the LOFR during large-scale incidents. The Volunteer Unit Leader is activated once the Volunteer Coordinator and the UC determine that there is a significant volunteer interest. The Volunteer Coordinator transitions to the Volunteer Unit Leader and is responsible for establishing a Volunteer Unit under the Planning Section

Historically, volunteers have not been utilized in oil spills outside the care and processing of oiled wildlife due to the health and safety hazards often present during an oil spill incident. However, recent California oil spill incidents have demonstrated there is strong public interest in volunteer participation in other aspects of spill response. The Non-Wildlife Volunteer Plan (NWVP) sets forth guidance and protocols for the use of volunteers for non- wildlife related work.

The NWVP is guidance to the Unified Command (UC) or Incident Commander (IC) to consider the integration of volunteers into oil spill response for missions other than oiled wildlife.

Refer to the Non-Wildlife Volunteer Plan.

4320.1 Assistance Options

The NWVP recommends a VU be staffed at the earliest opportunity to conduct notifications of local government volunteer organizations including Emergency Management Organizations, Non- Government Organizations, and the Emergency Volunteer Center. The VU's task during early activation stages also includes advising the UC of the possible external pressures to use volunteers and local government's ability to assist in managing volunteers.

4320.2 Assignment

Position descriptions for volunteers, and the staff that will be managing them, are included in the NWVP.

4320.3 Coordination

Refer to the Non-Wildlife Volunteer Plan (NWVP).

4320.4 Training

Public health and safety is the first priority in decisions regarding use of volunteers. Any volunteer interested in working an oil spill incident must register for the event and complete the required training. Members of the public and/or affiliated organizations providing their services without being registered for the event and completing required training will not be recognized as sanctioned volunteers for that oil spill incident.

In order to volunteer during an oil spill incident, you MUST fulfill the following requirements:

At least 18 years of age
CDFW/OSPR Volunteer Service Agreement or
California Governor's Office of Emergency Services Disaster Service Worker forms Oath of Allegiance and Declaration
Volunteer Information Form
Vehicle Authorization Form (only required if using private vehicle during duty assignment)
Able to lift 25 – 35 pounds
Complete health and safety training requirements
Review, sign and document understanding of incident Site Safety Plan

4400 DOCUMENTATION

The Documentation Unit Leader (DOCL) is responsible for the maintenance of accurate, up- to-date incident files. They will also provide duplication and copying services for all other sections and finally, will store incident files for legal, analytical, and historical purposes.

Refer to the Documentation Unit Leader Job Aid.

4410 Services Provided

The Documentation Unit Leader is responsible for the maintenance of accurate, up-to- date incident files. Examples of incident documentation include: Incident Action Plan, incident reports, communication logs, injury claims, situation status reports, etc.

Thorough documentation is critical to post-incident analysis. Some of the documents may originate in other sections. This unit shall ensure each section is maintaining and providing appropriate documents. The Documentation Unit will provide duplication and copying services for all other sections. The Documentation Unit will store incident files for legal, analytical, and historical purposes.

4420 Administrative File Organization

Refer to Section 4050 Documentation Unit in the Region IX Regional Contingency Plan.

4500 DEMOBILIZATION

The DMOB Unit Leader is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. Note that not all agencies require specific demobilization instructions.

Refer to the DMOB Unit Leader Job Aid.

4510 Sample Demob Plan

A Demobilization Plan template is available in Section 8.6 of the DMOB Unit Leader Job Aid.

4600 ENVIRONMENTAL

Refer to Volume II, Section 9800 of the Appendix for detailed environmental information, Sensitive Site Summaries, Economically Sensitive Site Tables, cultural and historic information, and the Geographic Response Strategies to protect them.

Section 9800 provides background, definitions, and philosophy behind the Geographic Response Strategies. Both Federal and State laws require that sites having special ecological sensitivity be identified and provisions be made to protect or otherwise mitigate for the site impacts from spills.

4610 Environmental Unit Positions

Environmental Unit Leader

As indicated in the Coast Guard Incident Management Handbook (COMDTPUB P3120.17A), the EUL is responsible for environmental matters associated with a response, including but not limited to:

1. Strategic assessment;
2. Modeling;
3. Surveillance;
4. Environmental monitoring and permitting;
5. Preparing and providing environmental data for the Situation Unit;
6. Identifying sensitive areas and recommending response priorities;
7. Consulting with natural resource trustees to provide input on wildlife and site protection strategies, including Endangered Species Act provisions;
8. Consulting with historical/cultural specialists to develop plans for protection of historical/cultural resources;
9. Developing shoreline cleanup and assessment plans;
10. Evaluating use of response technologies; and
11. Developing waste management and disposal plans.

State natural resources trustee agencies, designated in Fish and Game Code Section 1802, and the Lempert-Keene- Seastrand Oil Spill Prevention and Response Act; and Federal natural resources trustee agencies, as designated in 40 CFR Section 300.600(b)(1) and (2) and Section 300.605, are qualified (e.g., have knowledge of local resources specific to incident location, ICS, spill response, use of protection strategies, response equipment and response technologies) and provide the

response knowledge and expertise necessary to fill positions in the Environmental Unit including the EUL position.

Therefore, it is the recommendation and policy of the Region IX Regional Response Team and the California coastal Area Committees that, whenever possible, the EUL position be filled with an experienced response employee of a natural resource trustee agency. The designated EUL may be assisted by a Deputy EUL provided by another trustee agency or by the RP representative.

Resources at Risk Technical Specialist (RAR)

As indicated in the Coast Guard Incident Management Handbook, the RAR THSP participates in environmental mitigation and remediation of oil impacts. These duties include, but are not limited to:

- Identifies resources thought to be at risk from exposure to the oil through analysis of known/anticipated oil movement and the location of natural, economic and historic/cultural resources;

- Considers the relative importance of the resources and the relative risk to develop a priority list for protection in the impacted area.

Based on these responsibilities it is essential that the individual filling the RAR Technical Specialist position be qualified in spill response and knowledgeable of local resources. Natural resource trustee agency members possess these qualifications and should assume the role of RAR Technical Specialist.

Therefore, it is the policy of the Region IX Regional Response Team and the California coastal Area Committees that, whenever possible, the RAR Technical Specialist position be filled by a qualified and knowledgeable employee of a state or federal natural resource trustee agency as designated by law.

Applied Response Technology Lead Technical Specialist (ART THSP)

As indicated in the Coast Guard Incident Management Handbook, the ART THSP participates in environmental mitigation and remediation of oil impacts. These duties include, but are not limited to:

- Evaluate opportunities to use various applied response technologies (ARTs), including dispersants or other chemical countermeasures, in-situ burning, and bioremediation;

- Conduct the consultation and planning required to deploy a specific applied response technology, and articulate the environmental tradeoffs of using or not using a specific ART.

Based on these responsibilities it is essential that the individual filling the ART Lead Technical Specialist position be trained, knowledgeable and qualified. Unlike other ICS leadership positions described elsewhere in this policy, ART use decisions rest specifically with the FOSC, and not more generally with the Unified Command. The FOSC needs to assure that ART policies are being properly evaluated, implemented and documented as directed by the RRT. The ART Lead Technical Specialist working on behalf of the FOSC needs to know how to accomplish these critical evaluation tasks expertly and efficiently. As the decision to use ARTs is inherently a government decision, it follows that the OSPR ART Lead Technical Specialist and/or NOAA Scientific Support Coordinator (SSC) should staff this position. Both the OSPR ART Lead

Technical Specialist and the NOAA SSC possess the necessary qualifications, have existing/established roles with the RRT and FOSC, understand the environmental trade-off discussions that need to occur with trustee agencies, and can ensure that any ART decisions made and technologies implemented occur with proper evaluation, approvals, documentation, and coordination with the Operations Section. This also assures that an FOSC decision to use any ART, as approved/directed by the RRT, also leverages the ART Lead Technical Specialist's ability to incorporate, whenever possible, trustee agency input and Best Management Practices that will help support any conclusions related to the net environmental benefit that can be achieved through ART use. The individual filling the ART Lead Technical Specialist position must be the individual most qualified and knowledgeable of ARTs, policies, processes, and local resources requiring protection during an oil spill response.

Therefore, it is the policy of the Region IX Regional Response Team and California coastal Area Committees that, whenever possible, the Applied Response Technology Lead Technical Specialist position be filled by qualified OSPR ART Lead Technical Specialist, the NOAA Scientific Support Coordinator, and/or other trained and qualified personnel from a response or resource trustee agency.

4620 Public Health Concerns, Seafood Tainting, and Fisheries Closure

Fish and shellfish are resources that may be seriously impacted in oil spill events. If these resources are impacted, issues of primary concern are public health, seafood tainting, and fisheries closure. The fishery closure protocol requires the director of the California Department of Fish and Wildlife (CDFW) to close affected waters to the take of all fish and shellfish within 24 hours of a spill. However, this closure is not required if the Office of Environmental Health Hazard Assessment (OEHHA) finds within that time that a public health threat does not or is not likely to exist. If a fishery is closed, the director must reopen the closed areas if OEHHA notifies the director, within 24 hours of receiving the notification, that there is no public health threat. If the fishery is closed and remains so for 48 hours, the director is required, within seven days from notification, to order expedited tests of fish and shellfish known to be taken for commercial, recreational, or subsistence purposes in the closed area. The director is authorized to modify the boundaries of the closure area if OEHHA makes a determination that contamination from the spill or discharge does not pose a threat to the entire closed area. Further, fish and shellfish from the affected area may not pose a threat to human health but may have a taint in the smell or taste, which could affect current and future market sales.

4700 TECHNICAL SUPPORT

Technical Specialists are advisors with special skills needed to support the incident. Technical Specialists may be assigned anywhere in the ICS organization. If necessary, Technical Specialists may be assigned to a separate unit. The Planning Section will maintain a list of available specialists and will assign them where needed. The following are example position descriptions for Technical Specialists that might be utilized during an oil spill response.

4710 Hazardous Materials

Refer to Section 7000 Hazardous Substances for sources of technical support for hazardous materials.

4710.1 Toxicologist

Toxicologists study the safety and biological effects of chemicals, agents, and other substances on living organisms. They develop methods to determine harmful effects, the dosages that cause those effects, and safe exposure limits.

4710.2 Product Specialist

A Product Specialist is an individual who works for a private enterprise and who is knowledgeable of the operating characteristics of specific materials spilled or released that may harm the environment.

4710.3 Certified Marine Chemist

A Certified Marine Chemist (CMC) promotes the science of, and improves the methods of evaluation and eliminating health, fire and explosion hazards in marine and associated industries.

Refer to the 2021 Marine Firefighting Contingency Plan for sources for Certified Marine Chemists.

4710.4 Certified Industrial Hygienist

An Industrial Hygienist (IH) is a professional evaluating the health effects of chemicals or noise in a workplace. The IHs use their knowledge to anticipate when hazardous conditions could occur and cause an adverse health effect on a worker or the environment.

4710.5 Chemist or Chemical Engineer

Chemical engineers (CE) concern themselves with the chemical processes that turn raw materials into valuable products. CE skills encompass all aspects of design, testing, scale-up, operation, control, and optimization, and require a detailed understanding of the various "unit operations", such as distillation, mixing, and biological processes, which make these conversions possible.

4710.6 Sampling

Technical Support for hazardous materials sampling can be obtained from the USCG National Strike Force or the EPA Region IX Response Team.

4720 Oil

4720.1 Scientific Support Coordinator

The Scientific Support Coordinator (SSC) provides the Federal On Scene Coordinator (FOSC) scientific advice with regard to the best course of action during a spill response. The SSC will obtain consensus from the Federal Natural Resource Trustee Agencies and provide spill trajectory analysis data, information on the resources at risk, weather information, tidal and current information, etc. The SSC will be the point of contact for the Scientific Support Team

from National Oceanic and Atmospheric Administration's (NOAA) Hazardous Material Response and Assessment Division.

4720.2 Lightering

In addition to local, commercial lightering companies, the Coast Guard National Strike Force and Navy Supervisor of Salvage and Diving (SUPSALV) own oil-pumping equipment. They both have equipment capable of pumping highly viscous oils.

4720.3 Salvage

Navy Supervisor of Salvage and Diving (SUPSALV) maintains standing worldwide commercial contracts for salvage, emergency towing, deep ocean search and recovery operations, and oil pollution abatement. Additionally, they own, maintain and operate the worldwide Emergency Ship Salvage Material (ESSM) system, which incorporates the world's largest inventory of salvage and pollution abatement equipment. SUPSALV also owns, maintains, and operates a large number of deep ocean search and recovery systems, with depth capabilities up to 20,000 feet.

SUPSALV has been assigned as 1 of 7 special teams available to the Federal On-Scene Coordinator (FOSC). Thus, they provide assistance (personnel and/or equipment) for commercial oil or hazardous substance spills, or potential spills (i.e. salvage operations), as requested by the FOSC. Assistance ranges from salvage technical or operational assistance to mobilization of SUPSALV and other Navy resources to support a partial or full federal response to a marine casualty.

USCG Request Message Template

Refer to Section 8000 and the 2021 Marine Firefighting Contingency Plan for more sources of technical support for salvage operations.

4720.4 Shoreline Cleanup Assessment

Shoreline Cleanup and Assessment Team (SCAT) Coordinator serves in the Environmental Unit and reports to the Environmental Unit Leader. This function is responsible for assessing oiled shorelines and providing appropriate cleanup recommendations relative to the types of shorelines and the degree to which they have been impacted. The SCAT Coordinator should typically be staffed by a government regulatory natural resource trustee.

Trustee agencies have personnel most familiar with local natural resources requiring protection during an oil spill response. In addition, trustee agencies have, and must ensure, their statutory and regulatory natural resource protection authorities are recognized and used in the most effective and efficient way during an oil spill response.

Therefore, it is the policy of the Region IX Regional Response Team and the California Coastal Area Committees that, whenever possible, the SCAT Coordinator position be filled by qualified OSPR staff member or other trustee agency staff. To maintain flexibility in ICS staffing, the

Unified Command retains the discretion to fill the SCAT Coordinator position and replace any person filling that position as the FOSC deems appropriate.

Refer to the NOAA Shoreline Assessment Manual for tools and job aids.

4720.5 Natural Resource Damage Assessment

Natural Resource Damage Assessment (NRDA) is the process of identifying and quantifying injuries to natural resources and their services as a result of a release, and then determining the value of those injuries or losses for the purpose of restoration. The DOI Rules and NOAA rules establish an assessment process and provide a mechanism for determining the merits of going forth with the assessment and claim.

NRDA activities generally do not occur within the structure, processes, and control of the ICS; however, many NRDA activities overlap with the environmental assessment performed for the spill response. The NRDA Team coordinates and communicates their actions through the NRDA Representative via the Liaison Officer (LOFR). Therefore, NRDA Representatives should remain coordinated with the spill response organization via the LOFR, and may need to work directly with the IC/UC, Planning and Operations Sections, and SSC to resolve any issues and prevent duplicative efforts. While NRDA resource requirements and costs may fall outside the responsibility of the Logistics and Finance/Administrative Sections, coordination is important.

DOI and DOC/NOAA can also provide technical assistance for the initiation of damage assessments. The Federal damage assessment regulations for oil discharges mandated under OPA were developed by NOAA and are now final (15 CFR Part 990). The regulations developed by DOI under CERCLA and CWA authorities apply to releases of hazardous substances, and are in effect and available for trustee guidance and use (43 CFR Part 11).

4720.6 Specialized Monitoring of Applied Response Technologies (SMART)

SMART is used to scientifically monitor the use of dispersants, other chemical countermeasures, or in-situ burns. These operations however, because of their time sensitivity shall not be delayed pending the arrival of SMART monitoring equipment or personnel. SMART Teams are available through the USCG National Strike Force.

4720.7 Response Technologies (Dispersant, ISB, Bioremediation, Mechanical)

The Alternative Response Technologies (ART) Technical Specialist is responsible for evaluating the opportunities to use ART, including dispersant or other chemical countermeasures, in-situ burning, and bioremediation. The specialist will conduct the consultation and planning required to deploy a specific ART, and articulating the environmental tradeoffs of using or not using a specific ART.

The RRT Region IX ART Technical Specialist is Ms. Ellen Faurot-Daniels at the California Office of Spill Prevention & Response, (831) 649-2888.

4720.8 Decontamination

The Decontamination Group is responsible for decontamination of personnel and response equipment in compliance with approved statutes. Contaminated personnel and personnel entering contaminated areas shall be decontaminated in accordance with the instructions of the Site Safety Officer (SSO). The USCG National Strike Force has extensive decontamination capabilities and equipment.

Refer to the sample Decontamination Plan.

4720.9 Disposal

Refer to Section 3240 Disposal, for technical support resources for disposal.

4720.10 Dredging

Dredging is a method for removing large volumes of sediment (and oil) from the seabed. Large volumes of water, oil, and sediment are typically generated in the dredging process and must be handled, stored, and disposed of as the recovery operation proceeds. Accurate vertical control of the dredge depths is critical to minimizing the amount of dredged material and the amount of clean sediment contaminated with oil as the result of the dredging operation.

4720.11 Deepwater Removal

Navy Supervisor of Salvage and Diving (SUPSALV) owns, maintains, and operates a large number of deep ocean search and recovery systems, with depth capabilities up to 20,000 feet.

SUPSALV

4720.12 Heavy Lift

Refer to the 2021 Marine Firefighting Contingency Plan for more information on heavy lift operations.

4730 General

4730.1 Cultural and Historic Properties

Section 106 of the NHPA requires federal agencies to consider the effects of their actions on historic and archeological sites that are listed or eligible for listing on the National Register (NR). Regulations for accomplishing this responsibility have been published in the Federal Register at 36 CFR 800: Protection of Historic Properties. However, the NR is not sufficient to determine all of the properties that need to be considered for oil spills, as properties that could be determined eligible for inclusion in the NR must also be considered.

National Register of Historic Places

The national Programmatic Agreement (PA) was adopted to ensure that historic properties are considered in the planning for and conduct of emergency response. The PA facilitated the

ability of Federal agencies to develop and execute a uniform nationwide approach to handling historic properties before and during emergency response. Implementation of the PA ensured that emergency response is in compliance with Section 106 of the NHPA. Guidance for the executing the PA is located in Section 1930 Cultural and Tribal Resources of the Region IX Regional Contingency Plan.

Most cultural resource information is confidential and is located in the California Historical Resources Information System (CHRIS). This System is a detailed database maintained by the Office of Historic Preservation of the California Department of Parks and Recreation. To keep these resources as secure as possible, CHRIS can only be accessed by certified archaeologists, including the State Historical Preservation Officer (SHPO).

4730.2 Legal

USCG District 11 Legal Division provides legal assistance to the FOSC when needed.

D11 Legal Duty Phone: **510-437-5325**

4730.3 Chaplain

Since religious convictions and spiritual concerns may play a pivotal role in the self-understanding of many response personnel, incidents that have a NIMS ICS category of Type 3 or above may become highly stressful, emotionally charged, and even physically dangerous; especially when events encourage individuals to rely or refer to their spiritual understanding of life as the means for coping with traumatic events. Chaplains equipped with a pastoral skill set which includes CISM and Operational Stress Continuum model can be immediately effective in providing ministry of presence, on scene counseling, and spiritual/ religious support.

USCG District 11 Chaplain: **510-437-3078**.

4730.4 Public Health

The U.S. Department of Health and Human Services (HHS), through the Agency for Toxic Substance and Disease Registry (ATSDR), serves the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances. The ATSDR is directed by congressional mandate to perform specific functions concerning the effects on public health of hazardous substances in the environment. These functions include public health assessments, waste sites, health consultations concerning specific hazardous substances, health surveillance and registries, and response to emergency release of hazardous substances.

4730.5 Human Resources

During a complex, prolonged response with large numbers of response personnel in the field and the command post, there may be a need for Human Resources Specialists. Each agency represented should determine their own need for Human Resources support.

4730.6 Critical Incident Stress Management (CISM)

The CISM Specialist is responsible for identifying and securing the immediate response and services of sufficient CISM team members necessary to carry out CISM duties to provide for the psychological and emotional needs of Coast Guard personnel involved in a major incident. The CISM Specialist is the POC for all requests from operational units for CISM services and is responsible for the appropriate assignments and duties of all CISM team members involved in the evolution. The CISM Specialist is normally assigned in Logistics under the Medical Unit Leader. Refer to the CISM Specialist Job Aid on the Coast Guard Homeport website.

Sector LA-LB CISM Coordinator: **310-521-6136**.

4740 Law Enforcement

Refer to Section 3360 Law Enforcement.

4750 SAR

Refer to Section 3310 Search and Rescue.

4760 Marine Fire

Refer to the 2021 Marine Firefighting Contingency Plan.

4770 Potential Places of Refuge (PPOR)

The NRT guidance indicates that Places of Refuge decisions are often made under extreme time constraints. While it is desirable to inform and include the wide array of stakeholders in the decision process, time may not permit such an engagement.

Minimally, the COTP and the responsible party's salvage representatives will be included. In a Unified Command, an additional key player is the State On-Scene Coordinator who will liaise with the Governor's Office and local agencies. A State or Federal Resources at Risk Technical Specialist who is familiar with local resources can assist with PPOR assessment and communicate with other resource trustees. In instances requiring a quick-term decision, these may be the only participants. Ultimate PPOR decision authority resides with the COTP.

When circumstances permit and there is more time for advance planning for the vessel arrival, a more comprehensive assessment can be made by forming a PPOR Evaluation Team within the Planning Section. The Unit will include USCG personnel, a salvage team representative, a lead Natural Resources Trustee, and a local government agency representative.

The PPOR Evaluation Team first works with salvors to determine vessel location preference for needed repair or salvage operations. The PPOR Evaluation Team Leader is tasked with ensuring the preliminary PPOR list includes all potential places which can meet the response needs, and not just the preferred or convenient locations. Once an initial PPOR list has been created, the PPOR Evaluation Team must then determine the possible scenarios and consequences to evaluate human health and safety risks, natural resources at risk, and economic interests using the job aids and

guidance discussed in Section 8000. Each scenario should be written down so that details and critical decision points are captured throughout the evolution and can be articulated later.

4800 Required Correspondence, Permits & Consultation

4810 Administrative Orders

Administrative Orders are issued to protect public health and welfare under Section 106(a) of CERCLA or Section 311(e)(1)(B) of the FWPCA to a vessel (note: CERCLA Administrative Orders cannot be issued to a vessel) or facility requiring corrective measures when there is a discharge/release or threat of discharge/release involving oil, hazardous substance, pollutant, or contaminant.

Any person directly affected by an Administrative Order may request reconsideration by the FOSC. If not satisfied with the decision of the FOSC, that person may appeal in writing to the Eleventh Coast Guard District Commander. The District Commander's decision is final.

4820 Notice of Federal Interest

The FOSC shall present a Notice of Federal Interest for an Oil Pollution Incident to every suspected discharger. This informs the suspected discharger of a potential violation of the FWPCA, as amended, and of his or her possible liability to a civil penalty of up to $46,192 per day of violation or up to 3 times the costs incurred by the OSLTF. Notice should also be made in potential pollution incidents when the actions of the potential discharger to abate the threat are considered insufficient, and Federal action is contemplated.

4830 Notice of Federal Assumption

Under FWPCA Section (311)(c)(1), whenever a polluter is unknown or not acting responsibly, or when its removal effort is insufficient, or to prevent the substantial threat of a discharge, the FOSC may assume total or partial control of response activities. The FOSC must inform the suspected polluter, if known, of this action by issuing a Notice of Federal Assumption of Response Activities, even if the suspected polluter has not initiated any action. This notice references the Notice of Federal Interest for an Oil Pollution Incident and indicates the date and time the Federal response is initiated.

4840 Letter of Designation

The National Pollution Funds Center (NPFC) is responsible for the designation of source and notification of associated responsible parties and guarantors for an oil pollution incident. The USCG FOSC has also been delegated this authority for use in rare circumstances as outlined in the NPFC Instruction M5890.3, Technical Operating Procedures (TOPs) for Designation of Source under the Oil Pollution Act of 1990.

Technical Operating Procedures

National Pollution Funds Center

4850 Fish and Wildlife Permits

The regulation that provides for permits for activities associated with oil and hazardous waste spills is found at 50 CFR 21.31.

4860 ESA Section 7 Consultations

Whenever the FOSC makes a determination that federal response actions may affect ESA-listed (threatened or endangered) species and/or designated Essential Fish Habitat, the Coast Guard shall initiate emergency consultation protocols as appropriate. ESA Section 7 (ESA-7) consultation is completed through the regional offices of the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), and the Department of the Interior, U.S. Fish and Wildlife Service (USFWS). These agencies are referred to as "the Services." The FOSC initiates this emergency consultation as soon as practicable, via phone call and/or email to the Services, after the response is initiated. If the FOSC determines consultations are not practicable during emergency response operations, refer to the NRT's Post-Response Procedures guidance for ESA Section 7 and EFH compliance requirements in the stand-alone LA-LB ACP Planning Annex.

The three ESA thresholds, which are used to determine action necessary by the FOSC, are:

(1) **No Effect** (none at all, negative or positive);

(2) **May Affect; Not Likely to Adversely Affect**, (NLAA); and

(3) **May Affect; Likely to Adversely Affect** (LAA).

The two EFH thresholds, which are used to determine action necessary by the FOSC, are:

(1) **Would Not Adversely Affect**; and

(2) **May Adversely Affect** (Adverse Effects are any effect that reduces the quality or quantity of EFH).

The FOSC is responsible for contacting an ESA specialist at the appropriate agency that is responsible for an endangered species or critical habitat that could be affected. The FOSC should consult with the ESA specialist informally to discuss the oil spill response activities and the measures that could be taken to minimize any damage to the endangered species or a designated critical habitat. The ESA specialist will advise the FOSC regarding which response measure(s) will avoid or minimize impacts on listed species and critical habitat and which response measure(s) are preferred. These recommendations must be considered but shall not stand in the way of response efforts. The ESA specialist and the FOSC jointly evaluate tradeoffs and sensitive area priorities.

USFWS ESA Specialists

ACP 4: Jeff Phillips	jeff_phillips@fws.gov	24hr: 805-402-6612
ACP 5: Carol Roberts	carol_a_roberts@fws.gov	24hr: 760-607-9768

NMFS ESA Specialist

ACP 4/5: Joe Dillon	joseph.j.dillon@noaa.gov	cell: 707-480-3496

Refer to USFWS Information for Planning and Consultation (IPAC) database for an interactive map of endangered/threatened species.

Refer to NOAA Essential Fish Habitat mapping tool for an interactive map of Essential Fish Habitats.

Following an emergency (as soon as practicable after the emergency is under control), the Action Agency should initiate formal consultation if listed species or critical habitat have been adversely affected. The request should be submitted in writing and must include:

- a description of the emergency;
- a written justification for the expedited consultation/initial contact;
- an evaluation of the impacts of the emergency and the response to the emergency on endangered or threatened species and designated critical habitat, including
- how the Services' pre-planned recommendations (if any) were implemented and
- the results of the implementation on minimizing "take"

A more detailed form to update the services following the initial response phase of the spill incident is provided with the NRT ESA-7 guidance in the stand alone LA-LB ACP Planning Annex and on the National Response Team website.

After the emergency has ended, any of the following *may* be produced as a result of the consultation process: biological assessment, letters of concurrence, initiation package, and biological opinion including an incidental take statement.

4870 Disposal

Refer to Section 3240 Disposal, for required documentation for disposal.

4880 Dredging

The Army Corps of Engineers (ACOE) should be consulted for any required correspondence and permitting for dredging operations.

ACOE Los Angeles District

4890 Decanting

Refer to Section 3240.2 Decanting Policy, for required documentation for decanting.

48100 Potential Places of Refuge (PPOR) Evaluation Team

The ultimate authority and responsibility for making a PPOR decision rests with the COTP. Thus, the PPOR Evaluation Team Leader should be a USCG member of the Incident Management Team (IMT), who can coordinate the efforts of salvors, implement the COTP salvage objectives, directives and concerns, review and comment on the salvage plan. The PPOR Evaluation Team Leader will

also provide direct coordination between the COTP, Salvage Master, Operations Section Chief, and other IMT positions and Salvage Branch functions. Ideally this PPOR Evaluation Team Leader should have strong familiarity with salvage, local port issues, and Potential Places of Safe Refuge (PPOR) assessment tools and preplanning. This PPOR Evaluation Team Leader shall have direct contact with the COTP and shall keep the Operations and Planning Chiefs informed of concerns and progress and be available for stakeholder outreach and media/public interviews and addresses.

Refer to Section 8000 of this plan for details.

5000 LOGISTICS

5100 LOGISTICS SECTION ORGANIZATION

The Logistics Section is responsible for providing facilities, all services and materials needed for the incident. The FOSC acting as the Incident Commander will determine the need to establish a Logistics Section on the incident.

Six functional units can be established within the Logistics Section. If necessary, a two-branch structure can be used to facilitate span of control. The titles of the units are self-descriptive. Not all of the units may be required, and they will be established based upon need.

5200 SUPPORT

The Support Branch Director, when activated, is under the direction of the Logistics Section Chief, and is responsible for development and implementation of logistics plans in support of the Incident Action Plan, including providing personnel, equipment, facilities, and supplies to support incident operations. The Support Branch Director supervises the operation of the Supply, Facilities, Ground Support and Vessel Support Units.

5210 Supply

The Supply Unit Leader is primarily responsible for ordering personnel, equipment and supplies; receiving, and storing all supplies for the incident; maintaining an inventory of supplies; and servicing non-expendable supplies and equipment.

5210.1 Oil Response Equipment

OPA 90 mandated the creation of a national database of response resources that is maintained by the Coast Guard NSFCC. This equipment locator system is known as the Response Resource Inventory (RRI). The RRI includes data received from companies that wish to have their equipment listed in a publicly accessible system, as well as data generated from the OSRO classification program.

USCG Response Resource Inventory

Local OSROs:

National Response Corporation 562-432-1304
https://nrcc.com/services/

Patriot Environmental 800-624-9136
https://www.patriotenvironmental.com/

MSRC 800-645-7745
https://www.msrc.org/services/oil-spill-response

Clean Harbors Environmental Services 310-764-5851
https://www.cleanharbors.com/

Heritage Environmental Services 562-595-0209
https://www.heritage-enviro.com/

5210.2 Hazardous Substance Response Equipment

EPA maintains a variety of equipment to respond to hazardous substance emergencies regardless of their nature, size, or location.

EPA Response Equipment

The Coast Guard National Strike Force (NSF) provides highly trained, experienced personnel and specialized equipment to Coast Guard and other federal agencies to facilitate preparedness for and response to oil and hazardous substance pollution incidents in order to protect public health and the environment.

National Strike Force Specialized Response Equipment

5220 Facilities

5220.1 Incident Command Post (ICP) options

Incident Command Posts needs vary from incident to incident.

Refer to Incident Command Posts, a list of pre-vetted ICP facilities posted to the Sector LA-LB page on Homeport.

The General Services Administration (GSA) can also assist in securing an Incident Command Post.

5220.2 ICP Needs (rooms, phones, fax, copiers, tables/chairs, security, radios, etc.)

Several basic features must be considered when selecting incident command post (ICP) sites. These considerations include:

- Location - The incident command post should be in the general area of the incident. It does not need to be at the incident site and for many reasons should be located away from the incident, including preventing the administrative activities surrounding a spill from interfering with operations.
- Size - The command post must be capable of accommodating the number of people anticipated. An estimated need of 50-sq. ft./. /person will provide adequate workspace within the ICP. Additional support area for food service, etc. should be considered.
- Layout - The command post should be compatible with the NIMS organization. Individual spaces for the following are desirable:

- Unified Commander Private Rooms
- Unified Command Center
- Planning Section
- Logistics Section
- Operations Section
- Finance Section
- Public Affairs (should be separated from the above)
- Meeting Room (should be separated from the above)

- Parking - Parking for personnel plus visitors and command vehicles should be present.
- Electricity - Power demands at command posts are heavy. Computers, cell phones, and radios are becoming standard equipment for responders. Each person in the command post will likely have need for at least one outlet. Power strips can decrease the required number of building outlets provided the electrical supply is adequate for the load.
- Telephones - Telephones are critical. For planning purposes one phone line for every two people in the command post is used. Some of these phones should be designated "incoming only".
- Air Operations - Air over-flights will be a normal part of the incident response daily routine. Heliport/bases should be in close proximity to the command post. This will reduce staff and unified commanders' travel time to and from over-flights.
- Security - A security control station will be needed, along with sufficient security personnel to control access to the command center and associated peripheral equipment/facilities.
- Sanitary Facilities - Provisions should be made to accommodate large numbers of people on site around the clock.

5220.3 Berthing

San Luis Obispo Visitors Bureau..... (805) 541-8000

Santa Barbara Visitors Bureau ..... (805) 966-9222

Ventura Visitors Bureau..... (805) 648-2075

Long Beach Visitors Bureau ..... (562) 436-3645

Los Angeles Visitors Bureau..... (213) 624-7300

Redondo Beach Visitors Bureau ..... (310) 376-6911

Huntington Beach Visitors Bureau ..... (714) 969-3492

Newport Beach Visitors Bureau ..... (714) 644-1190

5220.4 Port/Dock Facilities/Capacities

Morro Bay Harbor Dept. ..... (805) 772-6254

Port San Luis Harbor Dept. ..... (805) 595-5400

Santa Barbara Harbor Dept. ..... (805) 564-5529

Ventura Harbor Dept. ..... (805) 642-8618

Channel Islands Harbor Dept. ..... (805) 382-3001

Oxnard Harbor Patrol ..... (805) 595-5435

Santa Monica Harbor Department ..... (310) 458-8694

Redondo Beach Harbor Department ..... (310) 318-0632

Port of Los Angeles ..... (310) 519-3500

Port of Long Beach ..... (562) 590-4185

Long Beach Marina ..... (562) 437-0041

Newport Bay Harbor Department ..... (714) 723-1002

Dana Pt Harbor Patrol ..... (714) 248-2222

5220.5 Staging Areas

Refer to Section 3500 Staging Areas.

5220.6 Security Providers

California's Bureau of Security and Investigative Services can provide assistance with approved security providers.

Bureau of Security and Investigative Services.

5220.7 Airports/Heliports

Refer to Volume II, Section 9800 of the Appendix.

5220.8 Temporary Storage and Disposal Facilities (TSDs)

Refer to Section 3240 Disposal.

5220.9 Maintenance and Fueling Facilities (land/water)

Under development by the LA-LB Area Committee.

5220.10 Fish and Wildlife Response Facilities and Resources

Refer to Section 3600 Wildlife.

5230 Vessel Support

5230.1 Boat Ramps/Launching Areas

Northern Sector

Anacapa Boatyard ..... (805) 985-1818

Anacapa Isle Marina ..... (805) 985-6035

Channel Islands Boat Yard ..... (805) 984-9273

Channel Islands Marina ..... (805) 985-7558

Ventura Harbor Boatyard ..... (805) 654-1433

Vintage Marina ..... (805) 984-3366

Southern Sector

Cabrillo Marina Dive N' Surf ..... (310) 372-8423

King Harbor Marine ..... (310) 374-8923

Marina Cove Ltd. ..... (310) 376-6927

Port Royal Marina ..... (310) 376-0431

Portofino Inn ..... (310) 379-8481

Redondo Beach Marina ..... (310) 374-3481

Redondo Marine Hardware ..... (310) 376-0512

Basin Marine Shipyard ..... (714) 673-0360

California Dry Slip ..... (714) 675-5901

Newport Harbor Shipyard ..... (714) 723-6800

South Coast Boatyard ..... (714) 675-2837

5230.2 Vessel/Boat Sources

The contracted OSRO can provide a variety of different Vessel/Boat options.

Refer to Section 9240.1 Clean-up Companies.

5230.3 Maintenance

Each agency or contracted OSRO is responsible for maintenance of their assets.

5240 Ground Support

5240.1 Vehicle Sources

Northern Sector

Cars/Buses

ABC Rents-All Trucks ..... (805) 687-4414

Avis Cars ..... (805) 964-4848

Budget Cars/Trucks ..... (805) 963-6651

Hertz Cars ..... (805) 967-0411

Hertz Equipment and Truck Rental ..... (805) 658-9100

Hertz/Penske Trucks ..... (805) 963-3216

Ryder Trucks ..... (805) 963-0039

Flynn Charter ..... (805) 386-5117

Roesch Lines ..... (909) 885-4465

Equipment Rental

Equipment Rentals ..... (805) 687-4414

ABC Rent-Alls Inc. ..... (805) 684-4173

CJ Equipment Rentals ..... (805) 656-1123

Chapin's URENT Inc. ..... (805) 488-1516

Southern Sector

Cars/Buses

Avis ..... (800) 331-1441

Budget ..... (800) 527-0700

Dollar ..... (800) 421-6878

Enterprise ..... (800) 325-8007

Hertz ..... (800) 654-6511

National ..... (800) 328-4567

California Charter ..... (562) 634-7469

Greyhound ..... (800) 231-2222

Laidlaw Transit Co. ..... (310) 638-1023

Roesch Lines..... (909) 885-4465

American Tour & Leasing..... (714) 533-6390

Greyhound..... (800) 231-2222

Laidlaw Transit Inc..... (310) 638-1023

Equipment Rental

A Rentals Co..... (562) 439-2139

CAL-RENT..... (562) 434-9963

Hertz Equipment Rental..... (310) 538-8368

Total Equipment Rentals..... (562) 595-6555

U.S. Rentals..... (562) 422-1283

John A. Thomas Crane & Truck..... (714) 556-1834

M. L. Bashaw Inc. ..... (562) 598-9295

U. S. Rentals..... (714) 842-7765

5240.2 Maintenance

Maintenance of rental cars will be the responsibility of the rental company.

5300 SERVICES

5310 Food

5310.1 Catering/Messing Options

Under development by the LA-LB Area Committee

5320 Medical

5320.1 Medical Facilities

San Luis Obispo County

Arroyo Grande Community Hospital..... (805) 473-7626 (E.R.)

French Hospital..... (805) 543-5353

General Hospital..... (805) 781-4800

Marian Medical Center..... (805) 922-5811

Sierra Vista Regional Med Center..... (805) 546-7650

Twin Cities Community Hospital..... (805) 434-3500

Santa Barbara County

Goleta Valley Cottage Hospital..... (805) 967-3411

Ventura County

Community Memorial Hospital ..... (805) 652-5011

Los Angeles County

Long Beach Memorial Hospital ..... (562) 933-2000

Orange County

Hoag Hospital..... (714) 760-2372

5320.2 Ambulance/EMS Services

Refer to Section 9240.10 for a list of Ambulance/EMS Service providers.

5400 COMMUNICATIONS

5410 Communications Plan

The primary purpose a communications plan is to establish which radio frequencies will be used for interagency communication in an oil spill response. Most of the frequencies are within the marine band of the VHF-FM spectrum. A secondary purpose is to identify the operating frequencies used by principal federal and state agencies and provide an overview of those agencies' capabilities and resources.

A sample ICS 205 Communications Plan and other guidance can be found in the Communications Unit Leader Job Aid.

5410.1 Incident Communications

Unified Command Coordination Frequency
Channel 83A (157.175Mhz): frequency for communication between the Coast Guard and OSPR. This frequency will also be used for communications with USCG and OSPR aircraft involved in the response operation.

Unified Command/Responsible Party Coordination Frequency
150.980Mhz: frequency for communication between the Coast Guard/OSPR and the Responsible Party and/or the OSROs.

U.S. Coast Guard working frequencies
Channel 81A (157.075Mhz): frequency for communication between U.S. Coast Guard units and other Coast Guard personnel who are part of the FOSC staff.

Safety Frequency
Channel 06 (156.3Mhz): frequency used by all parties for communication on matters

involving human health and safety. FCC regulations require all vessels equipped with VHF-FM capability to have this channel.

CA Office of Oil Spill Prevention and Response (OSPR)
159.435Mhz (TX) and 151.415Mhz (Rx): OSPR wardens' and biologists' working frequencies. OSPR wardens do have radios with VHF channel 83A, and this may be the best way to establish and maintain contact between them and CG first responders in the initial stages of a spill response.

47 CFR Part 90.65 designates the frequencies listed below as available for use in oil spill containment and cleanup operations:

(1) 36.25Mhz VHF-FM

(2) 41.71Mhz VHF-FM

(3) 154.585Mhz VHF-FM

(4) 158.445Mhz VHF-FM

(5) 159.480Mhz VHF-FM

(6) 454.000Mhz UHF*

(7) 459.000Mhz UHF*

5410.2 Communications Support

The Coast Guard Pacific Strike Team possesses a cache of programmable hand-held VHF- FM radios and a computer, which can tune those radios to any desired frequency. The Strike Team also owns several portable repeaters, which can be tuned to a desired frequency and deployed wherever necessary.

OSPR has a system of repeaters and high sites throughout the state. At present coastal coverage is approximately 75%. However, two portable repeaters are also available to provide coverage in remote areas and provide for a local net at a spill site. OSPR has a cache of 34 handheld "pool" radios for use by other agencies or groups assisting in spill response.

Coast Guard Deployable Communications Force (DCF) supports CONUS/OCONUS missions within 6-hours of notification. These teams reside in Novato, CA and Chesapeake, VA and are comprised of highly skilled technicians and subject matter experts who operate advanced command, control and communications assets in support of multiple missions including, but not limited to, natural disasters, Homeland Security operations, Search and Rescue, Law Enforcement and Maritime Special Response Teams.

Deployable Communications Force asset request is available through the Coast Guard Portal.

5410.3 Communications Facilities

The Coast Guard Sector Los Angeles - Long Beach is equipped with a local VHF-FM Band radio in its command center. Transmitting from its low site antenna on top of the Sector LA-LB building, it has a reliable range of approximately 20 miles, which covers up to the east coast of Catalina Island.

The Coast Guard also has a system of high sites along the coast designed to provide VHF- FM and UHF coverage of the entire coast called Rescue 21. Rescue 21 provides the communications infrastructure for Search and Rescue, Marine Safety, Law Enforcement, Environmental Protection, and Homeland Security Missions.

Sector LA-LB Command Center: **310-521-3801**

6000 FINANCE/ADMINISTRATION

6100 FINANCE/ADMINISTRATIVE SECTION ORGANIZATION

Finance Section Chief (FSC) is a member of the General Staff. The FSC is responsible for all financial, administrative and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section. This can be performed by one individual or can be expanded, as needed, into additional organizational units with appropriate delegation of authority.

Refer to the Finance Section Chief Job Aid.

6200 FUND ACCESS

National Pollution Funds Center Guide

Funding Guidance for Oil Spills & Hazardous Materials Releases

The person or persons responsible for discharges or releases are liable for costs of cleanup. The FOSC shall attempt to have the party responsible for the discharge or release voluntarily assume responsibility for containment, removal, and disposal operations. If the FOSC determines that the responsible party has caused the discharge of oil or release of hazardous substances, he/she may initiate appropriate response actions established by Oil Pollution Act of 1990 (OPA), Clean Water Act (CWA), or Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Action will be initiated by the agency administering the funding mechanism to recover such expenditures from the party responsible for the discharge. The FOSC may also issue an Administrative Order, either by consent or unilaterally, to require financially viable responsible parties to conduct the removal action.

6210 Federal On-Scene Coordinator (FOSC) Access

FOSC's access the Oil Spill Liability Trust Fund (OSLTF) via the Ceiling and Numbering Assignment Processing System (CANAPS). CANAPS automates and centralizes the creation and management of project numbers and ceilings for federally funded responses initiated by Federal On-Scene Coordinators (FOSCs).

CANAPS

6220 State Access

The President, upon the request of a Governor of a State, or the individual designated by the Governor, may obligate the OSLTF through the National Pollution Funds Center (NPFC) for payment in an amount not to exceed $250,000 for removal costs consistent with the National Contingency Plan (NCP) required for the immediate removal of a discharge, or the mitigation or prevention of a substantial threat of a discharge, of oil. Requests for access to the OSLTF must be made by telephone or other rapid means to the FOSC.

6230 Trustee Access

Federal Lead Administrative Trustees (FLATs) may submit an Initiate Request to the NPFC to fund the initiation of a Natural Resource Damage Assessment (NRDA). Natural Resource Trustees designated by the President of the United States, state, territorial governor, or Indian tribal governing authority may submit natural resource damage (NRD) claims to the NPFC for NRD costs not paid by the RP.

6300 COST

The Cost Unit Leader is responsible for collecting all cost data, performing cost effectiveness analyses, and providing cost estimates and cost saving recommendations for the incident.

6310 Cost Documentation Procedures, Forms & Completion Report

Refer to the National Pollution Funds Center Guide.

6400 TIME

The Time Unit Leader is responsible for equipment and personnel time recording. Without accurate tracking of personnel and equipment time on an incident, the cost of the response cannot be computed with any confidence and individual responders may not be compensated for their efforts.

6500 COMPENSATION/CLAIMS

The Compensation/Claims Unit Leader is responsible for the overall management and direction of all Compensation for Injury Specialists and Claims Specialists assigned to the incident. The Compensation/Claims Unit must act quickly on claims so that there is no perception that the Unified Command is not taking action.

OPA 90 Claims Regulations

NPFC Claimant's Guide

6600 PROCUREMENT

Timely contracting for services and supplies is critical to the response effort. The Procurement Unit Leader is responsible for administering all financial matters pertaining to vendor contracts.

6610 Contracting Officer Authority

Unless the contractor cannot provide a timely and adequate response, selection of a non-BOA contractor by an FOSC is not authorized. A Shore Infrastructure Logistics Center (SILC) contracting officer is generally the only person authorized to hire a non- BOA contractor. If the contracting officer cannot be reached in a timely manner, the FOSC is authorized to issue non-BOA purchase orders, on an emergency basis only, with an initial limit not to exceed $5000, and a total limit not to exceed $25,000 per incident. The FOSC must contact the contracting officer within 24

hours after exercising this emergency authority. If the FOSC determines that another agency can assist in a removal effort, the FOSC may authorize that agency to perform removal actions, before executing a Pollution Removal Funding Authorization.

7000 HAZARDOUS SUBSTANCES

7100 INTRODUCTION/PURPOSE

While the basic Incident Command System/Unified Command (ICS/UC) is unchanged whether the response is to an oil discharge or hazardous substance release, including a Weapons of Mass Destruction (WMD) incident, there are a number of factors that are unique to hazardous substance releases. The purpose of this chapter is to provide users with information specific to responses to hazardous substance releases, including WMD incidents.

7110 Scope

This section will focus on hazardous substance incidents with the following characteristics:

- Release or imminent release of hazardous substances
- Multi-agency and/or multi-jurisdictional response
- Exceeds localized (city/parish/state) response capacity,
- Response exceeds one operational period,
- Response phase of the incident, through stabilization.

7120 Hazardous Substances Definitions

Before the process of planning for a hazardous substance incident response can begin, there has to be a clear understanding of the types of materials that are to be covered under this plan. The Comprehensive Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendment and Reauthorization Act (SARA) of 1986 defines hazardous substances as "hazardous waste" under the Resource Conservation and Recovery Act (RCRA), as well as hazardous substances regulated under the Clean Air Act, Clean Water Act, and the Toxic Substance Control Act. In addition, any element, compound, mixture, solution, or substance may also be specifically designated as a "hazardous substance" under CERCLA. This definition includes numerous hazardous chemicals as well as chemical warfare agents and radionuclides. CERCLA hazardous substances and associated Reportable Quantities (RQs) are listed in 40 CFR Part 302.4. CERCLA also applies to "pollutants or contaminant" that may present an imminent or substantial danger to public health or welfare. Most biological warfare agents have been determined to be pollutants or contaminants under CERCLA.

Petroleum products are specifically excluded from CERCLA and are not considered to be "hazardous substances" under Federal statute. State environmental statutes may consider these materials hazardous substances.

7130 Authority/Jurisdiction

Federal authorities for response to hazardous substance, pollutant, or contaminant; including biological, chemical, and radiological warfare agent releases are outlined in CERCLA (42 U.S.C. 9604) and the NCP, 40 CFR Part 300. Similar to oil spills, federal response authorities are shared

by the EPA and the USCG, with the EPA maintaining jurisdiction of hazardous substance releases in the inland zone and the USCG in the coastal zone. The jurisdiction of CERCLA is broader than that of the FWPCA in that it encompasses all environmental media (air, land, groundwater, and surface waters).

In California, in accordance with the Hazardous Materials Incident Contingency Plan (HMICP), the pre-designated state IC for hazardous materials spills on highways, the California Highway Patrol is the IC. When off-highway spills of hazardous substance impact human health and safety as the primary concern. Department of Toxic Substances Control or a local agency will assume the role of IC. During these off-highway incidents the California Department of Fish and Wildlife (CDFW), Office of Spill Prevention and Response (OSPR) may function in a support capacity for wildlife issues in order to assist the lead agency or SOSC. When a hazardous substance spill is no longer a threat to public safety, but continues to pose a threat to wildlife or habitat, CDFW-OSPR may assume the lead role as IC for the remainder of the cleanup.

7140 Responsible Party Actions

Any person in charge of a vessel or a facility shall report releases of hazardous materials in excess of the reportable quantity (RQ) (as identified in 49 CFR 172.101, Appendix A, Table 1) to the National Response Center (NRC) 24-hour telephone number, 800-424-8802, in accordance with the National Contingency Plan. Any release regardless of the amount is required to be reported to the State of California. Notification to the State can be done by contacting the State Warning Center's 24-hour telephone number, 800-852-7500.

The responsible party shall perform promptly the necessary removal action to the satisfaction of the predesignated FOSC and SOSC. Regardless of whether or not a cleanup will be conducted, the responsible party shall cooperate with all federal, state, and local agencies to ensure that the incident is handled in a safe, proper manner.

7200 Basic Response Protocols

In several respects, response activities for a hazardous material or substance release parallel those for an oil discharge. However, there are significant differences:

- Because the risk involved in a hazardous substance release are different, and sometimes unknown, the cleanup approach is necessarily more cautious than for an oil spill.

- There may be a greater public safety concern, with a significant media and community interest, and a necessity to include specialized technical advisors with expertise in dealing with toxic substances.

- While oil spill responders may, in an emergency, require as few as four hours of specialized training, workers who perform hazardous substance cleanup must have, by OSHA requirements, at least 40 hours of technically-orientated training.

7210 Hazardous Substance Incident Unified Command Objectives

Primary Unified Command objectives:

- Identify the hazards;
- Isolate the hazard area and secure the source;
- Protect the safety of the public and responders;
- Mitigate impact(s) to the environment;
- Remove contamination; and
- Activate response plans.

Other possible Unified Command objectives:

- Assess the threat of release;
- Environmental monitoring;
- Sample and forensic evidence collection/analysis.

7220 Criminal Incident Management

It may be unclear at the initial onset of a response whether the cause of a release was accidental or criminal. Local responders will likely be the first to arrive on scene to assess the situation and possibly take initial response measures to contain or stop the release.

In instances where criminal activity is suspected, coordination is required between law enforcement who view the incident as a crime scene, and other first responders who view the incident as a hazardous substance release or a disaster site. Although protection of life remains paramount, the protection and processing of the crime scene is imperative so perpetrators can be identified and apprehended.

Since 9/11/01, much attention has been given to terrorist incidents. A nuclear, biological, or chemical WMD type terrorist incident is inherently a hazardous substance release with a criminal investigation component. As such, it should be responded to under the National Response Framework (NRF). The Terrorism Incident Law Enforcement and Investigation Annex to the NRF also provides guidance on response to criminal incidents with significant impacts. A terrorist incident will always be treated as a federal crime scene, thus giving the Federal Bureau of Investigation (FBI) and local/state law enforcement agencies the initial lead in each response. Be aware that the FBI can activate federal resources to assist in the response activities.

The UC responding to an incident where terrorism is involved must be acutely aware of the unique nature of the Federal Government's response mechanisms for these types of incidents. HSPD-5 gave DHS the lead federal role for coordinating federal support to a state and local response; however, nothing in the NRF changes legal authorities or responsibilities outlined in other federal, state, or local laws and regulations. The UC may find themselves working with DHS, FBI, FEMA, or a number of other federal agencies under the NRF.

7230 Terrorism Credible Threat Determination

If a responder suspects terrorism, the FBI and local/state law enforcement must be notified as soon as possible. Given available evidence, statements, scenario, and intelligence; the FBI/Law Enforcement agencies will make the determination on whether the incident is credible. The FOSC may be approached by the law enforcement agencies to assist in obtaining initial investigative samples to confirm their "credible threat" determination if local sampling resources are not identified or available. The FOSC should share all available and applicable information with the law enforcement agencies to assist them in making these determinations.

7300 OPERATIONS

Operational activities for hazardous substance, pollutant, or contaminant releases are dependent upon the manner in which they are released (i.e., explosion, train derailment, fire, etc.) and the environment (air, water, soil) and/or structures impacted by the release. However, operational activities can be grouped into the following general steps:

- Incident threat to human health and the environment;
- Notification;
- Evacuate/shelter-in-place;
- Communicate the hazard warning to others;
- Removal of victims to safe area;
- Observe signs and symptoms of casualties;
- Determine extent of contamination;
- Establishment of exclusion, contamination reduction, and support zones;
- Control access to the area;
- Determine the contaminant/hazards involved;
- Control/stop further releases;
- Initiate decontamination procedures for response personnel/equipment;
- Sample water/soil/air/product;
- Contain material already released; and
- Implement countermeasures.

7310 Sampling Resources

Coast Guard Pacific Strike Team..... 415-883-3311

EPA Region IX Duty Officer..... 800-300-2193

FBI Hazardous Materials Response Unit..... 202-324-3000

7320 Air Plume Modeling

The National Response Framework designated the Interagency Modeling and Atmospheric Assessment Center (IMAAC) as the single Federal source of airborne hazards predictions during incidents that involve multiple federal agencies. IMAAC is responsible for producing and disseminating predictions of the effects from hazardous chemical, biological, and radiological releases. IMAAC is not intended to replace or supplant dispersion modeling capabilities that

Federal agencies currently have in place to meet agency-specific mission requirements. Rather, it provides interagency coordination to use the most appropriate model for a particular incident and for delivery of a single Federal prediction to all responders. An IMAAC fact sheet can be downloaded here: https://narac.llnl.gov/.

Emergency IMAAC assistance can be requested through IMAAC Operations at 925- 424-6465 or through the DHS National Operations Center at 202-282-8101.

CAMEO (For direct air plume modeling)

The CAMEO Suite of applications (CAMEO - Computer-Aided Management of Emergency Operations, ALOHA - Aerial Locations of Hazardous Atmospheres, and MARPLOT - Mapping Application for Response, Planning, and Local Operational Tasks) is designed to allow the user to plan for and respond to hazardous substance incident. The CAMEO Chemical Database has identification information and response recommendations for thousands of chemicals commonly transported in the United States. CAMEO also includes blank database templates that state and local organizations can enter information for facilities that store hazardous substances. The CAMEO software suite can be downloaded for free from: https://www.epa.gov/cameo.

ALOHA can predict the movement of hazardous substances in the atmosphere and display this on a digital map via MARPLOT. ALOHA has almost a thousand chemicals in its database. MARPLOT uses electronic maps created by the Bureau of Census that cover the entire country and can be downloaded for free as part of the CAMEO software suite mentioned above. Local HazMat Teams are often proficient with ALOHA modeling.

7330 Disposal

A number of different hazardous wastes may be generated as a result of an incident. The Responsible Party or lead agency must address proper disposal of the wastes in accordance with the Resource Conservation and Recovery Act (RCRA), the NCP, and state, and local regulations. Options for disposal of material connected to the emergency response action will be addressed by the California Department of Toxic Substances Control with support by the federal agencies for those agents, substances, or radioactive materials that need special care.

7400 HAZARDOUS MATERIALS RESPONSE RESOURCES

California certifies Hazardous Materials teams by Type. They are typed 1 – 3 based upon operational capabilities. The following pages describe the capabilities by Type and show where the certified teams are located in Southern California.

STATE OF CALIFORNIA JERRY BROWN, Governor

CALIFORNIA OFFICE OF EMERGENCY SERVICES
Fire and Rescue Division
3650 Schriever Ave
Mather, CA. 95655
Phone (916) 845-8711
Night-Weekends: (916) 845-8911
Fax: (916) 845-8396

Fire & Rescue Division
Special Operations Unit – Hazardous Materials

HAZ-MAT Company Resource Types – Quick Reference:

Haz-Mat Company resources are "typed" based upon an identified operational capability. Three levels (tiers) of Haz-Mat Company operational capability have been identified. These levels are based upon an increasing capability of intervention with an identified minimum amount of training and equipment.

	Type 1	Type 2	Type 3
Type of Incident:	• Known Industrial Chemicals • Unknown Industrial Chemicals • WMD / CBRN Substances	• Known Industrial Chemicals • Unknown Industrial Chemicals	• Known Industrial Chemicals
Air Monitoring:	• Combustible Gas • Carbon Monoxide • Hydrogen Sulfide •Specialty Gases • WMD/CBRN	• Combustible Gas • Carbon Monoxide • Hydrogen Sulfide •Specialty Gases	• Combustible Gas • Carbon Monoxide • Hydrogen Sulfide
Chemical Protective Ensembles:	• Liquid-Splash Protective • Vapor Protective • WMD/CBRN Protective	• Liquid-Splash Protective • Vapor Protective • Hi-Temp. Protective Gloves	• Liquid-Splash Protective
Ancillary Protective Clothing:	• Hi-Temperature Gloves • Cryogenic Protective Gloves • WMD/CBRN Protective Gloves • Radiological Protective Gloves	• Hi-Temperature Gloves • Cryogenic Protective Gloves	
Radiation Monitoring:	• Gamma • Beta • Alpha • Radionuclide	• Gamma • Beta	• Gamma • Beta
Technical Reference:	• Printed & Electronic • Plume Air Modeling, Overlays • WMD/CBRN Sources	• Printed & Electronic • Plume Air Modeling, Overlays	• Printed & Electronic
Intervention Capability:	• Dyking, Absorption • Liquid & Solid Plugging, Patch • Vapor Leak Plugging, Patch • Neutralization • WMD/CBRN Containment	• Dyking, Absorption • Liquid & Solid Plugging, Patch • Vapor Leak Plugging, Patch • Neutralization	• Dyking, Absorption • Liquid & Solid Plugging, Patch
Decontamination:	• Known Industrial Chemicals • Unknown Industrial Chemicals • WMD / CBRN Substances	• Known Industrial Chemicals • Unknown Industrial Chemicals	• Known Industrial Chemicals
Training:	• Hazardous Materials Specialist (240 hour) • Terrorist Technician/Specialist (16 hour)	• Hazardous Materials Specialist (240 hour)	• Hazardous Materials Technician (160 hour)

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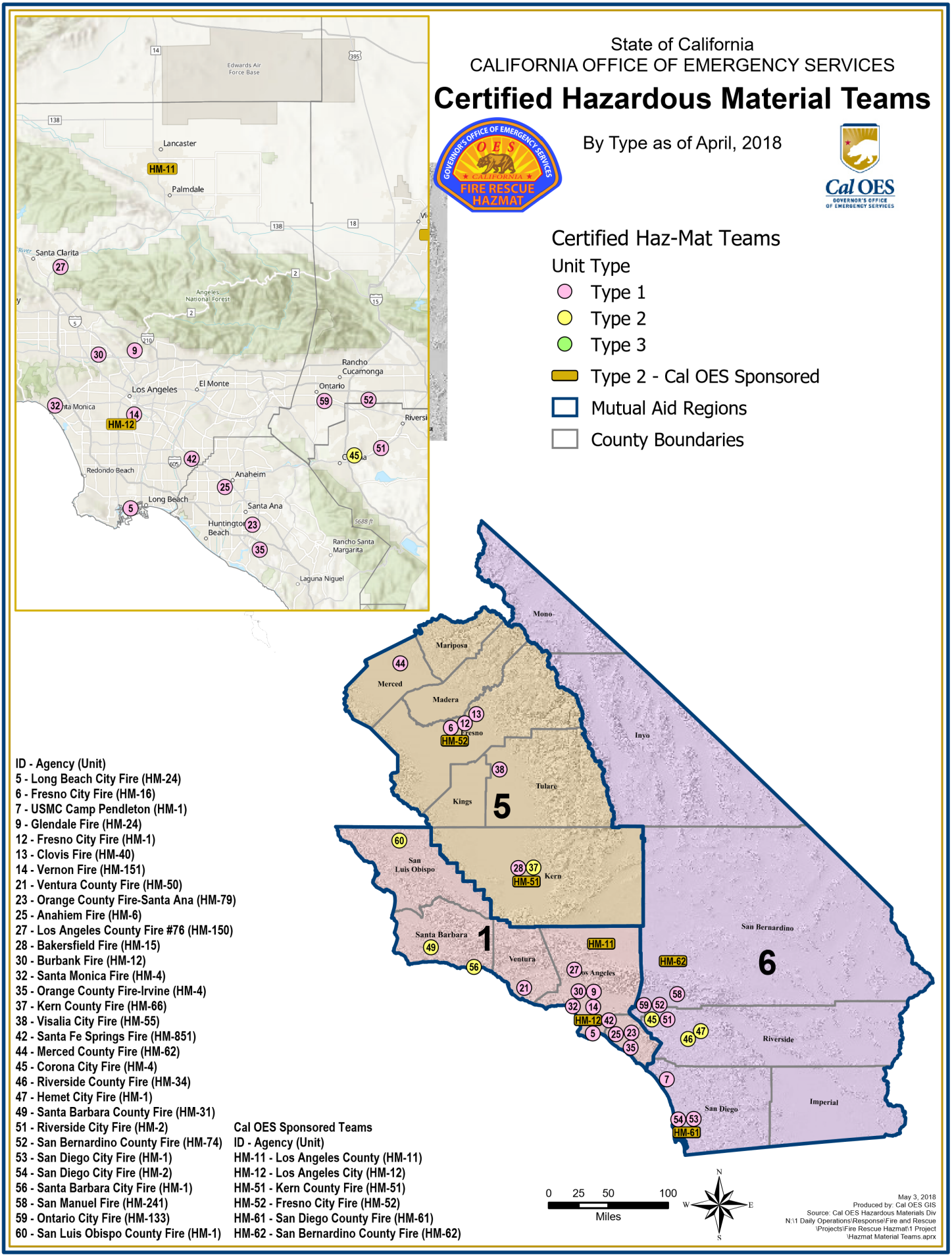

ID - Agency (Unit)
5 - Long Beach City Fire (HM-24)
6 - Fresno City Fire (HM-16)
7 - USMC Camp Pendleton (HM-1)
9 - Glendale Fire (HM-24)
12 - Fresno City Fire (HM-1)
13 - Clovis Fire (HM-40)
14 - Vernon Fire (HM-151)
21 - Ventura County Fire (HM-50)
23 - Orange County Fire-Santa Ana (HM-79)
25 - Anahiem Fire (HM-6)
27 - Los Angeles County Fire #76 (HM-150)
28 - Bakersfield Fire (HM-15)
30 - Burbank Fire (HM-12)
32 - Santa Monica Fire (HM-4)
35 - Orange County Fire-Irvine (HM-4)
37 - Kern County Fire (HM-66)
38 - Visalia City Fire (HM-55)
42 - Santa Fe Springs Fire (HM-851)
44 - Merced County Fire (HM-62)
45 - Corona City Fire (HM-4)
46 - Riverside County Fire (HM-34)
47 - Hemet City Fire (HM-1)
49 - Santa Barbara County Fire (HM-31)
51 - Riverside City Fire (HM-2)
52 - San Bernardino County Fire (HM-74)
53 - San Diego City Fire (HM-1)
54 - San Diego City Fire (HM-2)
56 - Santa Barbara City Fire (HM-1)
58 - San Manuel Fire (HM-241)
59 - Ontario City Fire (HM-133)
60 - San Luis Obispo County Fire (HM-1)

Cal OES Sponsored Teams
ID - Agency (Unit)
HM-11 - Los Angeles County (HM-11)
HM-12 - Los Angeles City (HM-12)
HM-51 - Kern County Fire (HM-51)
HM-52 - Fresno City Fire (HM-52)
HM-61 - San Diego County Fire (HM-61)
HM-62 - San Bernardino County Fire (HM-62)

8000 SALVAGE, MARINE FIREFIGHTING, & POTENTIAL PLACES OF REFUGE

This section lists Salvage and Marine Fire Fighting Resources. Refer to Sector LA-LB 2021 Marine Firefighting Contingency Plan on the Coast Guard Homeport website under the Los Angeles-Long Beach Port Directory for the entire stand-alone plan.

8100 SALVAGE RESOURCES

(Diving, Towing, Lightering, Lifting, & Marine Firefighting)

8110 Federal

U.S. Army Corps of Engineers 213-452-3405
Salvage, Dredging & Wreck Removal
Los Angeles District Navigation Section

U.S. Navy Supervisor of Salvage 202-781-1731
Diving, Salvage, Marine Firefighting, & Pollution Response
Washington, D.C. (local depot in Port Hueneme).....805-982-4463

USCG Request Message Template

8120 Local

Port of Long Beach Harbor Patrol 562-590-4185
Commercial Diving Unit
Long Beach, CA

8130 Commercial

American Marine Corporation 310-547-0919
Diving, Salvage, & Marine Firefighting Services
Terminal Island, CA

Associated Pacific Constructors, Inc. 805-772-7472
Diving & Salvage Services
Wilmington/Morro Bay, CA

Brusco Tug & Barge, Co. 805-986-1600
Towing & Dredging Services
Port of Hueneme, CA

- LULAPIN: 78-ft Fire/Rescue/Tow/Tug Vessel 3,800 BHP, 1,800 gpm fire pump & monitor
- SIMONE BRUSCO: 78-ft Fire/Rescue/Tow/Tug Vessel 4,000 BHP, 1,800 gpm fire pump & monitor

Coast Diving Services 310-547-0955
Underwater ship inspection, maintenance, and repair

Conley-Pacific Co. 562-437-2831
Marine Construction, Heavy Lift Deck Barge (350 Ton Capacity)
Long Beach, CA

Crowley Maritime 310-732-6500
Ocean Towing, Marine Salvage (through Titan Salvage)
San Pedro, CA

- ADMIRAL: 103-ft Tow/Tug Vessel 4,730 BHP
- LEADER: 103-ft Tow/Tug Vessel 4,730 BHP
- MASTER: 103-ft Tow/Tug Vessel 4,730 BHP
- SCOUT: 103-ft Tow/Tug Vessel 4,730 BHP
- VALOR: 100-ft Tow/Tug Vessel 6,772 BHP

Curtin Maritime 562-983-7257
Ocean Towing, Tug & Barge
Long Beach, CA

Foss Maritime Company 562-435-0171
Ocean Towing, Specialty Barges,
Offshore Service Vessels
Long Beach, CA

- ALTA JUNE: 73-ft Tow/Tug Vessel 5,000 BHP, 56t Bollard Pull
- ARTHUR FOSS: 99-ft Tow/Tug Vessel 4,000 BHP, 44t Bollard Pull
- BRYNN FOSS: 94-ft Tow/Tug Vessel 4,700 BHP, 52t Bollard Pull
- CAMPBELL FOSS: 78-ft Tow/Tug Vessel 5,000 BHP, 56t Bollard Pull
- CAROLYN DOROTHY: 78-ft Tow/Tug Vessel 5,800 BHP, 56t Bollard Pull
- EDITH FOSS: 73-ft Tow/Tug Vessel 2,085 BHP, 24t Bollard Pull

Global Diving & Salvage 800-441-3483
Diving & Salvage Services

Manson Construction 562-983-2340
Marine Construction & Dredging
Long Beach, CA

Harley Marine Services 310-549-1700
Ocean Towing, Tug & Barge
San Pedro, CA

- JOHN QUIGG: 76-ft Tow/Tug Vessel 4,800 BHP, 50t Bollard Pull
- MILLENNIUM DAWN: 105-ft Tow/Tug Vessel 4,400 BHP, 65t Bollard Pull, 1,400 gpm fire pump & dual monitors
- MILLENNIUM MAVERICK: 96-ft Tow/Tug Vessel 4,300 BHP, 55t Bollard Pull
- ROBERT FRANCO: 100-ft Tow/Tug Vessel 6,850 BHP, 91t Bollard Pull, 1,400 gpm fire pump & dual monitors
- TIM QUIGG: 80-ft Tow/Tug Vessel 3,600 BHP, 50t Bollard Pull

Muldoon Marine 562-432-5670
Diving & Light Salvage Services
Long Beach, CA

Pacific Tugboat Service 562-590-8188
Harbor & Ocean Towing, Marine Construction, Landing Craft, Specialty Barges
Long Beach, CA

Sause Brothers 562-901-0365
Ocean Towing, Tug & Barge, Offshore Service Vessels
Long Beach, CA

- ARAPAHO:64-ft Tow/Tug Vessel 1,610 BHP
- LAGUNA: 68-ft Tow/Tug Vessel 1,610 BHP
- REDONDO: 61-ft Tow/Tug Vessel 1,610 BHP

Ardent Global 832-850-4150
Diving, Salvage, & Marine Firefighting Services
Houston, TX

T&T Salvage 713-534-0700
Diving, Salvage, & Marine Firefighting Services
Humble, TX

Vessel Assist- Channel Watch Marine, Inc 800-391-4869
Diving & Light Salvage Services
Ventura, CA

Resolve Salvage & Fire 954-764-8700
Diving, Salvage, & Marine Firefighting Services
Ft. Lauderdale, FL

8200 POTENTIAL PLACE OF REFUGE (PPOR)

8210 Purpose and Scope

In accordance with National Response Team Region *Guidelines for Places of Refuge Decision-Making* and the Coast Guard Marine Environmental Response Manual *COMDTINST M16000.14A*, this Potential Places of Refuge (PPOR) section provides information/guidance for both an effective and efficient response to requests from ships in need of assistance and seeking a place of refuge. The objective of this section is to identify docking, anchoring, mooring, and/or grounding locations that may be selected as a Potential Place of Refuge and to provide decision-making tools in order to enhance the overall effectiveness of the response process. While information on possible sites is located in the Pre-Incident Survey Database, this does not imply that any of these sites will be the location of choice in a future event. Decision-makers must address both environmental and operational issues when determining where to direct a stricken vessel. The U. S. Coast Guard Captain of the Port (USCG COTP), Los Angeles – Long Beach has jurisdiction over approving a PPOR site for a vessel in distress. The COTP will confer with other federal, state, and local officials when deciding where and when to move a stricken vessel. In some cases urgency may preclude the COTP from formal stakeholder consultations and formal risk analysis processes. In such cases the COTP will make every attempt to conduct appropriate notifications. Selection of a Place of Refuge by the COTP, in consultation with other agencies and stakeholders will always be made on a case-by-case basis. Prior coordination and identification of PPOR sites significantly enhances the decision-making process and facilitates the overall response operation. Taking these actions helps prevent or minimize potential adverse effects to the vessel, public, environment, and resource users.

PPOR Guidance and Job Aid can be found on Sector LA – LB's Homeport website and on the OSPR website. The PPOR Guidance and Job Aid contains the Pre-Incident Survey Database containing pre-surveyed information for each identified place of refuge. The database information is necessary to complete the PPOR Risk Analysis Tool for vessels in distress. The pre-incident surveys, the PPOR charts, contain specific geographic and navigational data in addition to information about concerns for the potential impacts on human health and safety and natural resources, and economic consequences for all options a distressed vessel may have to mitigate their situation. The PPOR Guidance and Job Aid also contains the PPOR Risk Analysis Tool and a Vessel Information Checklist. Pre-identified PPOR sites will be shown on the Environmental Response Management Application (ERMA) ERMA Southwest PPOR ACP 4,5. Collectively these serve as the job aid designed for use during an incident.

Additional guidance which may be used in the PPOR decision making process include:

USCG Marine Environmental Response Manual.

National Response Team Region *Guidelines for Places of Refuge Decision-Making.*

IMO Resolution A.949(23) Guidelines on Places of Refuge for Ships in Need of Assistance.

The process for identification of additional geographic-specific PPOR sites within the USCG Los Angeles – Long Beach COTP zone may be identified and implemented at a future date. Future selection and designation of PPOR sites shall be in accordance with stated policy and guidance.

8220 Definitions

Deep Draft – Vessel having a draft between 25ft – 60ft.

Environmental Sensitivity Index (ESI) Maps – NOAA and CDFG-OSPR resource that provide a concise summary of coastal resources that are at risk if an oil spill occurs nearby. Examples of at-risk resources include biological resources (such as birds and shellfish beds), sensitive shorelines (such as marshes and tidal flats), and human-use resources (such as public beaches and parks).

When an oil spill occurs, ESI maps can help responders meet one of the main response objectives: reducing the environmental consequences of the spill and the cleanup efforts. Additionally, ESI maps can be used by planners--before a spill happens--to identify vulnerable locations, establish protection priorities, and identify cleanup strategies.

Place – An area that is delineated by geographic locale, jurisdictional boundaries, environmental considerations, controlling authorities, or other such methodology that groups or links a site or many sites. A place may also be a site, where the place and site are the same and no other sites are designated within the place.

Place/Site Identification – The place identification number is composed of the ACP number, place letter designator, and two digit site number each separated by a hyphen that is assigned to a pre-incident place/site survey.

"Potential Place(s) of Refuge" (PPOR) - Is defined as a location where a vessel needing assistance can be temporarily moved to, and where actions can then be taken to stabilize the vessel, protect human life, reduce a hazard to navigation, and/or protect sensitive natural resources and other uses of the area. A place of refuge may include constructed harbors, ports, docks, anchorages, a natural embayment, potential grounding sites, or offshore waters.

Pre-Incident Summary – Site specific summary which contains detailed geographic and navigational data in addition to information about concerns for the potential impacts on human health and safety, natural resources, and economic consequences.

Site – A subdivision of a place that is a more specific location that the place itself.

ACP #		Place Letter		Site Number
4	-	B	-	50

9000 APPENDICES

9100 EMERGENCY NOTIFICATION

9110 Initial Awareness, Assessment & Notification Sequence

9110.1 Initial Assessment Check-off List

The Initial Assessment and Initial Action Check-off List is maintained by the Sector LA-LB Command Center: Pollution Incidents QRC.

9110.2 Initial Action Check-off List

The Initial Assessment and Initial Action Check-off List is maintained by the Sector LA-LB Command Center: Pollution Incidents QRC.

9110.3 Notification Check-off List

National Response Center 800-424-8802
District 11 Command Center 510-437-3701
California Office of Spill Prevention & Response 800-852-7550
Sector San Francisco 415-399-3417
Sector San Diego 619-278-7281

9200 PERSONNEL AND SERVICES DIRECTORY

9210 Federal Resources/Agencies

9210.1 Trustees for Natural Resources

Department of the Interior Regional Environmental Officer: . 415-296-3355
U. S. Fish & Wildlife:
ACP 4: 805-402-6612

ACP 5: 760-607-9768

NOAA National Marine Fisheries Service:
Long Beach: 562-980-4000

Santa Rosa: 707-387-0737

Sacramento: 916-930-3600

9210.2 USCG

Sector LA-LB Command Center:..... 310-521-3801

Sector San Diego Command Center: 619-295-3121

Sector San Francisco Command Center:..... 415-399-3417

Air Station San Francisco: 650-808-2902/3

9210.2.1 USCG National Strike Force (NSF)

NSF Coordination Center:..... 252-331-6000
CDO: 252-267-3458

Pacific Strike Team: 415-883-3311
CDO: 415-559-9908

Gulf Strike Team:..... 251-441-6601

Atlantic Strike Team:..... 609-556-9376

9210.2.2 USCG District Response Advisory Team (DRAT)

D11 DRAT: 510-437-3697

9210.2.3 Public Information Assist Team (PIAT)

NSFCC:..... 252-331-6000

9210.2.4 USCG Reserve

Sector LA-LB Command Center:..... 310-521-3801

9210.2.5 USCG Auxiliary

Sector LA-LB Command Center:..... 310-521-3801

9210.3 National Oceanic and Atmospheric Administration (NOAA)

24-hour NOAA spill hotline: 206-526-4911

9210.3.1 Scientific Support Coordinator

office: 510-437-5344
cell: 206-321-3320

9210.3.2 Discharge & Release Trajectory Modeling

NOAA Scientific Support Coordinator
office: 510-437-5344
cell: 206-321-3320

9210.3.3 Oceanic & Atmospheric Modeling

NOAA Scientific Support Coordinator
office: 510-437-5344
cell: 206-321-3320

9220 State Resources/Agencies

9220.1 Government Official Liaison

Office of the Governor:.....916-445-2841

9220.2 Trustees for Natural Resources

California Department of Fish & Wildlife, Office of Spill Prevention & Response:

Report Spills: 800-852-7550
Sacramento HQ: 916-445-9338
San Luis Obispo:.....805-594-6165
Santa Barbara: 805-568-1231
Los Alamitos: 562-342-7214

California Coastal Commission:.....415-693-8375

9220.3 State Emergency Response Commission (SERC)

Cal OES: 916-845-8798

Emergency Services Coordinator: 916-845-8759

9220.4 State Environmental Agencies

California Conservation Corps:.....800-952-5627

9220.5 State Historic Preservation Office (SHPO)

office:.....916-445-7000

9220.6 Law Enforcement Agencies

California Highway Patrol: 800-835-5247

9220.7 Hazardous Substance Response Teams

California Department of Toxic Substances Control
Emergency Response Duty Officer:.....800-260-3972

California National Guard 95th Civil Support Team 562-413-1516

9230 Local Resources/Agencies

9230.1 Trustees for Natural Resources

Santa Barbara Channelkeeper:.....805-563-3377

Los Angeles Waterkeeper:.....310-394-6162

Orange County Coastkeeper: 714-850-1965

9230.2 Local Emergency Planning Committee (LEPC)

LEPC Region I Emergency Services Coordinator:..... 562-795-2958

9230.3 Local Environmental Agencies

Conservation Corps of Long Beach: 562-986-1249

9230.4 Law Enforcement Agencies

San Luis Obispo County Sheriff:..... 805-781-4550

Morro Bay Police Department:..... 805-772-6225

Santa Barbara County Sheriff: 805-681-4100

Santa Barbara Police Department:..... 805-897-2300

Ventura County Sheriff:..... 805-654-9511

Los Angeles County Sheriff:..... 310-539-1661

Los Angeles Port Police: 310-732-3500

Long Beach Port Police:..... 562-435-6711

Orange County Sheriff: 714-647-7000

9230.5 Port Authority/Harbormaster

Morro Bay Harbor Department:..... 805-772-6254

Port San Luis Harbor District:..... 805-595-5400

Santa Barbara Waterfront Division:..... 805-564-5531

Port of Hueneme:..... 805-488-3677

Oxnard Harbor District Harbormaster:..... 805-488-4615

L.A. County Beaches and Harbors (Marina del Rey):..... 424-526-7777

Port of Los Angeles:..... 310-732-3675

Port of Long Beach: 562-283-7000
24-HR Harbor Patrol Dispatch:..... 562-283-7820

Long Beach Shoreline Harbormaster:..... 562-570-4950

Huntington Beach Public Works:..... 714-536-5431

Newport Beach Harbormaster: 949-270-8159

9230.6 Fire Departments

San Luis Obispo County Fire: 805-543-4244

Santa Barbara County Fire: 805-681-5500

Ventura County Fire: 805-389-9710

Los Angeles County Fire: 323-881-2455

Orange County Fire: 714-573-6000

9230.7 Hazardous Substance Response Teams

Coast Guard Pacific Strike Team 415-883-3311

EPA Region IX Duty Officer 800-300-2193

FBI Hazardous Materials Response Unit 202-324-3000

9230.8 Explosive Ordnance Detachments (EOD)

San Luis Obispo County Sheriff Bomb Task Force: 805-781-4550

Santa Barbara County Sheriff Bomb Squad: 805-683-2724

Ventura County Sheriff Bomb Unit: 805-654-2380

Los Angeles County Sheriff Explosives Detail: 323-881-7500

Orange County Sheriff Hazardous Devices Section: 714-538-2694

9230.9 Site Safety Personnel/Health Departments

San Luis Obispo Public Health Department: 805-781-4553

Santa Barbara County Public Health Department: 805-681-5100

Ventura County Public Health: 805-654-2813

Los Angeles County Public Health: 888-700-9995

Orange County Public Health: 714-834-3155

9240 Private Resources

9240.1 Clean-up Companies (BOA and Non-BOA)

Patriot Environmental: 562-436-2614

NRC Environmental: 562-432-1306

Ocean Blue: 562-624-4120

MSRC: 800-645-7745

Clean Harbors: 310-764-5851

OC Vacuum: 877-984-8178

Global Diving & Salvage: 800-441-3483

SoCal Ship Services: 310-519-8411

9240.2 Media (Television, Radio, Newspaper)

Television

KSBY (San Luis Obispo): 805-541-6666

KTLA: 323-460-5503

KABC: 818-863-7600

KTTV(Fox): 310-584-2027

KCAL(CBS): 818-655-2000

KNBC: 818-840-3425

Univision: 310-348-3495

Radio

KNX 1070 (News): 323-900-2070

KCRW: 310-450-5183

Newspaper

Santa Barbara Independent: 805-965-5205

Ventura County Star: 805-437-0000

L. A. Times: 213-237-5000

Long Beach Press-Telegram: 562-499-1337

Orange County Register: 714-796-7984

9240.3 Fire Fighting/Salvage Companies/Divers

Global Diving & Salvage: 800-441-3483

Warren Diving: 310-548-9069

Ardent Global: 832-850-4150

DonJon Smit: 703-299-0081

Resolve Marine Group: 954-764-8700

T&T Salvage: 713-534-0700

9240.4 Fishing Cooperatives and Fleets

Trained/Maintained by MSRC: 800-645-7745

9240.5 Wildlife Rescue Organizations

Oiled Wildlife Care Network: 877-823-6926

International Bird Rescue: 310-514-2573

Marine Mammal Care Center: 310-548-5677

Marine Animal Rescue Specialists 800-399-4253

9240.6 Volunteer Organizations

American Red Cross: 310-445-9100

Volunteer Organizations Active in Disaster (VOAD): 703-778-5088

California VOAD: 661-477-3202

9240.7 Maritime Associations/Organizations/Cooperatives

Marine Exchange of Southern California: 310-832-6411

Propeller Club of LA-LB: 714-316-5269

9240.8 Academic Institutions

UC Santa Barbara Marine Science Institute: 805-893-8062

UC Davis School of Veterinary Medicine: 530-752-4167

9240.9 Laboratories

Bureau Veritas Los Angeles Oil and Gas Laboratory: 310-977-3727

9240.10 Emergency Medical Services

San Luis Ambulance Services: 805-543-2626

American Medical Response (Buellton): 805-688-6550

Lifeline Medical Transport (Ventura): 805-653-5578

Royalty Ambulance (Los Angeles): 818-550-5833

Care Ambulance Services (Los Angeles/Orange): 323-469-1234

9250 Stakeholders

9250.1 Political/Elected

United States Senate

Dianne Feinstein 202-224-3841

Kamala Harris 202-224-3553

United States House of Representatives

Salud Carbajal 805-730-1710

Julia Brownley 805-379-1779

Ted Lieu 323-651-1040

Nanette Barragan 310-831-1799

Alan Lowenthal 562-436-3828

Harley Rouda 714-960-6483

Mike Levin 949-281-2449

California Senate

Bill Monning 805-549-3784

Hannah-Beth Jackson: 805-965-0862

Henry Stern 818-876-3352

Ben Allen: 310-318-6994

Steven Bradford 310-514-8573

Tom Umberg 714-741-1034

Pat Bates 949-598-5850

California Assembly

Jordan Cunningham: 805-549-3381

Monique Limon: 805-564-1649

Jacqui Irwin: 805-482-1904

Richard Bloom: 310-450-0041

Autumn Burke 310-412-6400

Al Muratsuchi: 310-375-0691

Patrick O'Donnell 562-429-0470

Tyler Diep 714-843-4966

Cottie Petrie-Norris 949-251-0074

Bill Brough 949-347-7301

County Board of Supervisors

San Luis Obispo County 805-781-5450

Santa Barbara County 805-681-4200

Ventura County 805-654-5000

Los Angeles County 213-974-1411

Orange County 714-834-3550

9250.2 Environmental

Environmental Defense Center: 805-963-1622

Santa Barbara Channelkeeper 805-563-3377

Get Oil Out! 805-350-3811

Gaviota Coast Conservancy 805-683-6631

California Coastal Protection Network 805-637-3037

Santa Barbara Audubon Society 805-964-1468

League of Women Voters (SB Co.) 805-965-2422

Community Environmental Council (SB Co.) 805-680-1404

Citizens Planning Association 805-966-3937

Ventura Coastkeeper 805-667-7818

Sierra Club (SB, Vent. Co.) 305-283-6070

Environment California: 213-251-3688

Heal the Bay 310-451-1500

Los Angeles Waterkeeper: 310-394-6162

Sierra Club (LA Co.) 213-387-4287

League of Women Voters (LA Co.) 310-968-2085

Orange County Coastkeeper: 714-850-1965

9250.3 Economic

Port of Hueneme 805-488-3677

Port of Los Angeles 310-732-3675

Port of Long Beach 562-283-7000

9250.4 Scientific

UC Santa Barbara Marine Science Institute: 805-893-4093

USGS Pacific Coastal and Marine Science Center: 831-427-4450

9250.5 Cultural

San Luis Obispo Chumash Council 805-481-2461

Coastal Band of the Chumash Nation: 805-324-0135

Santa Ynez Band of Chumash Indians 805-688-7997

Barbareno/Ventureno Band of Mission Indians: 805-646-6214

Wishtoyo Foundation 805-794-1248

Gabrielino Tongva Indians of California: 562-761-6417

Juaneno Band of Mission Indians Acjachemen Nation 949-488-3484

Rincon Band of Luiseno Indians 760-749-1051

9250.6 Historic

California Office of Historic Preservation 916-445-7000

California Native American Heritage Commission 916-373-3710

9250.7 Stakeholder Engagement Matrix

A template to assist in engaging Stakeholders is located on the next page.

Stakeholder Type	Communication Strategies	Date Initiated	LOFR(s) Assigned
Non-Governmental Organizations			
Environmental			
Environmental Justice			
Community Organizations			
Other			

9300 Draft Incident Action Plan

A draft Incident Action Plan is located in the Los Angeles-Long Beach Port Directory on the Coast Guard Homeport website.

9400 Area Planning Documentation

9410 Discharge and Release History

Santa Barbara Oil Spill of 1969

On January 28, 1969, Platform "A" in the Santa Barbara Channel, constructed in 190 feet of water only months before, experienced a major blowout during a drill bit change-out. Large amounts of oil, gas, and mud roared up the well pipe, spewing onto the deck of the platform until the well was capped on February 7 with 13,000 barrels of heavy drilling mud. Unfortunately, because the well had been cased only to a depth of 238 feet, oil and gas breached the well several hundred yards from the platform, and then continued to find its way through natural seeps for the remainder of the year. Initially, oil was released at a rate of 5,000 barrels per day, creating a 25-square mile slick the first day alone. By March 3, oil release was reduced to 5-10 barrels per day. By the end of the year, subterranean pressure was reduced through neighboring wells, largely "turning off" the bulk of seepage and mitigating the spill. Figures on the total size of the spill are inconclusive; however, estimates range between 33,000 and 100,000 barrels of oil.

During and after the spill, Platform "A" oil was detected from Pismo Beach to as far south as Mexico. The majority of the spill fell upon local beaches and islands, affecting vessels, buildings and other facilities. Approximately 100 miles of beach were intensely impacted, covering numerous birds and intertidal organisms with oil. Estimates on birds killed by the spill vary widely; however, at least 3,700 were confirmed killed, with actual numbers probably much higher. By February 11, some 18,900 feet of boom had been deployed under poor-to-moderate weather conditions. Clean-up operations totaled over $4.5 million, encompassing 1,000 workers, 54 boats, and 125 pieces of mechanical equipment. Over 5,200 truckloads of oil debris were hauled to local landfills, including 3,000 tons of straw used as sorbent. Cleanup operations continued from January until August 15.

Pac Baroness/Atlantic Wing Collision of 1987

On September 21, 1987, twelve miles southwest of Point Conception, in foggy conditions, a collision occurred between the Panamanian freighter Atlantic Wing and the Liberian bulk carrier, Pac Baroness at position 34.21N, 120.45W. The Atlantic Wing was inbound toward Long Beach with a load of automobiles when its bow breached the number 4 and 5 cargo holds of the Pac Baroness, outbound from the Santa Barbara Channel Vessel Traffic Separation Scheme (VTSS). Although the Atlantic Wing was allowed to proceed to Long Beach under its own power, the Pac Baroness continued to take on water at an increasing rate until it sank some ten hours later at position 34.21N, 120.38W. The vessel was laden with 21,000 metric tons of dry bulk copper concentrate and had 386,000 gallons of oil aboard, including IFO 180, Marine Diesel Oil and Lubricating Oil. Aerial and surface observations based upon slick size color and coverage suggested an immediate discharge of 40,000 gallons.

By the next day, the resulting oil slick extended six miles south of the Pac Baroness's position. Much of the slick was naturally dispersed by choppy seas, with 250 gallons of dispersant (COREXIT 9527) being applied on September 24 to slick segments nearest the Channel Islands Marine Sanctuary. At the time of the accident, numerous birds and marine mammals were present on San Miguel Island, leading to serious concerns about environmental impacts. Fortunately, oil seepage from the Pac Baroness was minimal with estimates of continued seepage at less than one barrel per day. Had the vessel been a full laden oil tanker, its location near the Channel Islands Marine Sanctuary would have proved much more serious.

Refugio Spill of 2015

The Refugio Oil Spill occurred on May 19, 2015, due to the failure of an underground 24-inch pipeline (Line 901) near Highway 101 in Santa Barbara County. The responsible party (RP) was Plains All-American Pipeline. The pipeline failure caused crude oil to be released onto land and then it flowed into the Pacific Ocean. The spill was a significant event and was continuing to grow. The RP initially estimated the amount of crude oil released at about 104,000 gallons, with 21,000 gallons reaching the ocean. Within hours, the CDFW issued a closure of fisheries. The following day, Governor Edmund G. Brown, Jr., declared a state of emergency for Santa Barbara County.

The pathway of the crude oil caused significant oiling to terrestrial areas before reaching the ocean at Refugio State Beach. A cliff face above the beach and the shoreline at Refugio State Beach was most heavily impacted. Other areas of the Santa Barbara and Ventura coast were also significantly affected. The crude oil that entered the ocean posed a significant risk to and injured marine wildlife, including invertebrates, fish, birds, and mammals. In addition to direct natural resource impacts, the closure of beaches and fisheries occurred days before the Memorial Day weekend resulting in losses for local businesses and lost opportunities for the public to visit and enjoy the shore and offshore areas. Some tar balls attributable to the Line 901 release were carried by southerly ocean currents and eventually reached some beaches in Los Angeles County.

The oil cleanup was complex, covering inland terrestrial areas, a range of shoreline types, and on-water recovery. Cleanup was further complicated by the constant and unpredictable natural seepage of oil from numerous seabed fissures in the offshore area of Santa Barbara. The Unified Command conducted a phased approach to oil spill cleanup that provided for defined cleanup processes and goals for each cleanup phase. The Refugio Oil Spill cleanup effort completed its first phase (active cleanup and gross oil removal) on or around August 31, 2015 and the second phase (refined oil cleanup endpoints for shorelines targeting maximum net environmental benefit) on January 22, 2016. The third phase (monitoring and sampling for residual and buried oil) continued until December of 2016. Samples analyzed through December 2016 showed no match to the spilled oil. As of December 31, 2016 all monitoring end points had been met and the Unified Command has been dissolved.

Tarballs

Tar and oil residues are common on California beaches, especially in southern California where natural oil seeps are present. The USGS organic geochemistry team in Menlo Park, California provides geochemical information that can be used to distinguish between sources of tar from natural seeps and man-made spills. Baseline tar accumulation on beaches is an important

management tool to assess the environmental impact of natural oil seepage in contrast to possible oil spills or illegal dumping at sea. In Santa Barbara County, Santa Barbara Channelkeeper can provide background tarball data for specific beaches from their Shoreline Monitoring Program.

Natural Seeps

Oil and gas seeps are springs where liquid and gaseous hydrocarbons leak out of the ground. Oil and gas seeps are fed by natural underground accumulations of oil and natural gas referred to as oil and gas fields. Oil and gas seeps are found close to major oil and gas fields.

There are many naturally-occurring oil and gas seeps in the state of California. The oil in some seeps is sticky and thick, like tar; in others it is dark and runny, like strong coffee; gas seeps are invisible but may be ignited with a match. The lighter components of the oil are lost to evaporation, and the remaining heavier oil becomes sticky and brown or black.

It may be necessary to collect representative samples from natural seeps if present in the affected area.

These samples can be used to differentiate natural seep oil from the source of the spilled oil. It is recommended to have a helicopter with an experienced observer to direct the sampling platform to the natural seep areas in order to collect the sample as close to the natural seep source as possible. If the natural seeps are located sub-surface then divers will be needed to collect the sample directly from the sea floor.

This will require an established communications plan between the sampling platform and the helicopter. A dive safety plan will also be needed if divers are involved in sampling efforts.

Environmental factors such as biodegradation, mixing, or washing can affect spilled oil's chemical signature. The degree to which these factors affect individual samples collected for comparison to a spill source cannot be predicted. Each sample requires independent chemical analysis and evaluation.

Current laboratory methods can differentiate spilled oil from naturally occurring background oil with certainty if environmental factors have not too greatly altered the chemical signatures of individual samples. Every effort should be made to conduct sampling as soon as possible to eliminate any issues with regard to weathering.

The United States Geological Service (USGS) has conducted extensive research on California's oil and gas seeps and oil and gas fields. More information can be found at USGS.gov | Science for a changing world.

Oil and Gas Seeps Technical Specialists

University of California Santa Barbara Marine Science Institute

University of California Santa Barbara Isla Vista, CA 93117

Phone: (805) 893-4093

Website: http://msi.ucsb.edu/

U.S. Geological Service Pacific Coastal and Marine Science Center

345 Middlefield Road Menlo Park, CA 94025

Phone: (831) 427-4450

Website: https://www.usgs.gov/centers/pcmsc

9420 Risk Assessment

The Port of Los Angeles and Long Beach is one of the biggest and busiest ports in the world. The region accounts for much of the Southwest's oil refining/production capacity and is one of the world's largest ports in dry and containerized cargo volume. In the LA-LB FOSC Zone, there are numerous scenarios that may cause a WCD: groundings, collisions, equipment failure, natural disaster, offshore facility incident, pipeline rupture or wellhead failure, and oil terminal incidents.

The LA-LB FOSC Zone is home to over 50 fixed facilities, including 8 refineries, and 15 Mobile Onshore Facilities transferring oil and/or hazardous materials in bulk. Onshore fixed oil storage facilities present the greatest potential volume oil spill. A possible WCD scenario is multiple tank failures at an onshore facility during earthquake conditions. Common products handled at the largest of these facilities include unleaded gasoline, diesel fuel, crude oil, #2 fuel oil and #6 oil.

The California transportation fuel "infrastructure" consists of several interconnected assets operated by a combination of refiner and third-party companies.. The crude oil and petroleum product infrastructure assets are separate and distinct from one another – not interchangeable. The petroleum fuels infrastructure and distribution system falls into five main categories: refineries, pipelines, distribution terminals, marine facilities, and retail stations.

Southern California Oil Refinery Locations

Refinery Name	Location	Bbls Per Day - 2017
Chevron U.S.A.	El Segundo	269,000
Marathon Carson Refinery	Carson	243,800
PBF Energy	Torrance	160,000
Phillips 66	Wilmington	139,000
Marathon Los Angeles Refinery	Wilmington	97,500
Valero Energy	Wilmington	85,000

World Oil Refining	South Gate	8,500
Valero Asphalt Refinery	Wilmington	6,300

Southern California refiners depend on marine terminals for the majority of crude oil needed to operate their facilities and produce transportation fuels. Refiners usually have on hand between 7 and 10 days' worth of crude oil. California refineries, collectively received 1.7 million barrels per day (MBD) of crude oil in 2018. 1.2 MBD arrived via marine tanker from Alaska and foreign sources, followed by 547,000 bbl per day via pipeline and rail from San Joaquin Valley oil fields, New Mexico, Wyoming, and Canada.

9430 Planning Assumptions

1. The Coast Guard strives to maintain an open port, in which every effort should be taken to keep port operable.

2. This ACP was developed for response to a Type 1 or 2 oil spill incident.

3. A worst case discharge will require a coordinated response effort among stakeholders.

4. Oil spills will occur with little or no warning.

5. Cargo diversions from areas impacted by large-scale MTS disruptions will require surge management and increased safety and security measures.

6. A worst-case discharge will degrade local USCG capabilities and require large-scale support from resources outside the affected area.

7. Other contingency plans may be executed in conjunction with this ACP.

8. USCG missions will be conducted at normal operating levels during the response.

14. USCG Reservists may be recalled to active duty to meet operational requirements.

9440 Planning Scenarios

As required by the Federal Water Pollution Control Act (FWPCA) Section 311(j), Area Contingency Plans, when implemented with the National Contingency Plan, shall be adequate to remove a worst case discharge (WCD), and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility.

Worst Case Discharge:
As defined by section 311(a) (24) of the FWPCA, the definition of a Worst Case Discharge in the case of a vessel is a discharge in adverse weather conditions of its entire cargo, and in the case of an offshore facility or onshore facility or pipeline, the largest foreseeable discharge in adverse weather conditions.

Offshore – Worst Case Discharge

Although there are numerous offshore facilities operating within ACP 4 and ACP 5, the operations in the Santa Barbara Channel present the WCD scenario from an offshore facility. This WCD scenario was selected based on projected discharge volume, proximity to shorelines, areas of environmental and/or economic sensitivity, and marine and shoreline resources.

Offshore WCD includes the maximum capacity in the facilities on the platform and the maximum capacity volume of oil that would leak from the pipeline. The sum of these discharges is 3417 bbls for a WCD in the Santa Barbara Channel.

The Channel Islands National Marine Sanctuary, Santa Barbara and Ventura Counties have been identified as the most probable/greatest threat of impact in the event of this WCD. Channel Islands National Marine Sanctuary contains a diverse habitat which protects endangered species, hosts innovative research and conservation, world-class outdoor recreation, award-winning learning and volunteer programs, and archaeological remains can all be found in this area.

Marine Spill Response Corporation (MSRC) will be utilized for on-water containment and recovery of spills. MSRC response equipment, major equipment lists, equipment locations, and the temporary storage capability is provided on their website via hyperlink in Section 5210.1. MSRC has demonstrated its ability to meet the daily recovery capability standards for the Santa Barbara Channel of 12,500 bbl/day within 12 hours, 25,000 bbl/day within 36 hours, and 50,000 bbl/day within 60 hours. Shoreline and onshore cleanup will be provided by Patriot Environmental and NRC Environmental Services (NRC), equipment lists and locations are provided via hyperlink in Section 5210.1.

Upon notification of a release and mobilization of the response, either a fixed-wing aircraft or helicopter would be dispatched as promptly as possible to conduct visual surveillance at the spill source. If necessary and safe, the surveillance could be supplemented through use of vessels as well. The effectiveness of many response technologies (such as in-situ burning, dispersant application, and mechanical recovery) should be evaluated through collaboration with Regional Response Team IX.

In the event of a WCD from an offshore facility, offshore response strategies will include attempting to skim free-floating oil utilizing available OSRO Oil Spill Response Vessels (OSRVs), Oil Spill Response Barges (OSRBs), Vessels of Opportunity (VOO), Quick Strike OSRVs, and Temporary storage associated with the identified skimming and recovery. As with any large spill, additional cascading response equipment would be mobilized to the site from various OSRO bases outside the area. An offshore response could consist of simultaneous operations of approved dispersant application, containment booming, mechanical recovery, and in-situ burning. In the event that an offshore response is necessary, the following strategies will be implemented:

- Mobilize capability to regain control of, and plug the well.

- Mobilize mechanical recovery resources, including vessels (both OSRVs and VOOs), barges, ocean booming, skimming equipment, and spotter/surveillance aircraft. Begin deploying mechanical recovery resources as close to the source as possible to contain and collect concentrated oil in a timely and effective manner. Radio communication will be established between spotter aircraft and other surveillance systems (including AIS) with skimming vessels and barges to direct vessels to locations of concentrated oil to ensure maximum effectiveness and efficiency of mechanical recovery equipment.

- Mobilize dispersant resources to approved locations for both aerial and boat application, in areas where oil cannot be mechanically recovered. Dispersant application equipment may be mobilized at the discretion of RRT9. Large quantities of dispersants will likely be applied on the surface; therefore, RRT approval should be sought early in the response for ongoing use of dispersants.

- Mobilize offshore vessels equipped with remote sensing technologies (radar, infrared camera) to aid in night time operations and slick tracking. Remote sensing technologies assist skimming vessels in identifying thick areas of oil to enhance encounter rate.

- Activate the Oiled Wildlife Care Network. There will be a significant wildlife impact. Volunteer coordination should be addressed early in the response. There will be self-activated volunteers.

- Maintain an effective and well-coordinated response effort to control the source of the discharge up to the point when the Federal On-Scene Coordinator determines the response effort complete.

Waterfront Facility – Worst Case Discharge

The Sector Los Angeles – Long Beach Captain of the Port Zone contains less than 20 fixed bulk liquid transfer facilities subject to 33 CFR 154. Waterfront facilities with multiple large volume storage tanks are located in the Ports of Los Angeles and Long Beach. The WCD volume for the Marine Transportation Related portion of the facility is 2762 bbls. A catastrophic failure of one of these tanks and its associated secondary containment goes beyond the Marine Transportation Related portion of the facility WCD estimation. The WCD scenario for planning purposes is calculated as the capacity of the largest tank multiplied by credit for containment tank standards which equals 37,830 bbls. This WCD scenario was selected based on projected discharge volume, economic resources at risk, proximity to shorelines, areas of environmental sensitivity.

The Marine Transportation System in the Ports of Los Angeles and Long Beach has been identified as the most probable/greatest threat of impact in the event of this scenario. Cabrillo Beach and the Los Angeles breakwater are the closest environmentally sensitive sites that will require protection.

National Response Corporation Environmental Services (NRCES) could be utilized for on-water containment and recovery of spills. NRCES response equipment, major equipment lists, equipment locations, and the temporary storage capability is provided on their website via

hyperlink in Section 5210.1. NRCES has demonstrated its ability to meet the daily recovery capability standards of 18,500 bbl/day within 6 hours, 25,000 bbl/day within 24 hours, and 62,500 bbl/day within 60 hours. Shoreline and onshore cleanup could be augmented by Patriot Environmental if needed.

Upon notification of a release and mobilization of the response, either a fixed-wing aircraft or helicopter would be dispatched as promptly as possible to conduct visual surveillance at the spill source. The surveillance could be accomplished through use of vessels as well. Recovery strategies will include attempting to skim free-floating oil utilizing available OSRO Oil Spill Response Vessels (OSRVs), Oil Spill Response Barges (OSRBs), Vessels of Opportunity (VOO), Quick Strike OSRVs, and Temporary storage associated with the identified skimming and recovery. As with any large spill, additional cascading response equipment would be mobilized to the site from various OSRO bases outside the area. A response could consist of simultaneous operations of containment booming, mechanical recovery, and shoreline cleanup. When recovery is necessary, the following strategies will be implemented:

- Mobilize operations to regain control of secure the source of the spill
- Mobilize mechanical recovery resources, including vessels (both OSRVs and VOOs), barges, booming, skimming equipment, and spotter/surveillance aircraft. Begin deploying mechanical recovery resources as close to the source as possible to contain and collect concentrated oil in a timely and effective manner.
- Mobilize equipment with remote sensing technologies (radar, infrared camera) to aid in night time operations and slick tracking. Remote sensing technologies assist recovery operations in identifying thick areas of oil to enhance recovery rate;
- Maintain an effective and well-coordinated response effort to control the source of the discharge and recover spilled material up to the point when the Federal On-Scene Coordinator determines the response effort complete.

Vessel – Worst Case Discharge

Tanks ships call on the Ports of Los Angeles and Long Beach frequently, carrying crude oil products to supply the many refineries in the Sector Los Angeles – Long Beach Captain of the Port Zone. VLCC class tank ships typically call on Terminal 121 in the Port of Long Beach. A vessel WCD is defined by the FWPCA as a discharge, in adverse weather conditions of its entire cargo. The loss of the entire cargo of this class tankship would be 2,000,000 bbls of crude oil products. A serious marine incident, in adverse weather conditions, in the Los Angeles – Long Beach Outer Harbor causes the loss of the entire cargo of the tank ship. A spill of this size in the Port of Los Angeles - Long Beach Outer Harbor would be a Spill of National Significance.

The Marine Transportation System in the Ports of Los Angeles and Long Beach have been identified as the most probable/greatest threat of impact in this scenario. The Golden Shore Marine Reserve and the Long Beach Harbor Breakwater are the closest environmentally sensitive sites that will require protection. Shoreline impacts in Long Beach would be almost

immediate. Los Alamitos Bay and the Cerritos Wetlands would soon be impacted as well. Cabrillo Beach Wetlands to the west could also be impacted. The volume of this spill will close popular Los Angeles and Orange County beaches for extended periods of time due to beach clean up requiring extensive labor and time.

All Oil Spill Response Organizations and equipment in the local area would be deployed for this scenario. Marine Spill Response Corporation (MSRC) will be utilized for on-water containment and recovery of spills. MSRC response equipment, major equipment lists, equipment locations, and the temporary storage capability is provided on their website via hyperlink in Section 5210.1. Shoreline and onshore cleanup will be provided by Patriot Environmental and NRC Environmental Services (NRC), equipment lists and locations are provided via hyperlink in Section 5210.1. As with any large spill, additional cascading response equipment would be mobilized to the site from various OSRO bases outside the area.

Upon notification of a release and mobilization of the response, either a fixed-wing aircraft or helicopter would be dispatched as promptly as possible to conduct visual surveillance at the spill source. Recovery strategies will include attempting to skim free-floating oil utilizing available OSRO Oil Spill Response Vessels (OSRVs), Oil Spill Response Barges (OSRBs), Vessels of Opportunity (VOO), Quick Strike OSRVs, and Temporary storage associated with the identified skimming and recovery. As with any large spill, additional cascading response equipment would be mobilized to the site from various OSRO bases outside the area. A response could consist of simultaneous operations of containment booming, mechanical recovery, and shoreline cleanup. When recovery is necessary, the following strategies will be implemented:

- Mobilize mechanical recovery resources, including vessels (both OSRVs and VOOs), barges, ocean booming, skimming equipment, and spotter/surveillance aircraft. Begin deploying mechanical recovery resources as close to the source as possible to contain and collect concentrated oil in a timely and effective manner. Radio communication will be established between spotter aircraft and other surveillance systems (including AIS) with skimming vessels and barges to direct vessels to locations of concentrated oil to ensure maximum effectiveness and efficiency of mechanical recovery equipment;

- Activate the NOAA Scientific Support Coordinator and request trajectories.

- Mobilize Shoreline Cleanup and Assessment Technique teams to impacted and potentially impacted areas.

- Activate the Oiled Wildlife Care Network. There will be a significant wildlife impact.

- Volunteer coordination should be addressed early in the response. There will be self-activated volunteers.

- Activate Regional Response Team IX (RRT9) and consider Alternative Response Technologies. Oil Spill Cleanup Agents and/or Dispersant application equipment may be mobilized at the discretion of RRT9.

Pipeline – Worst Case Discharge

There is an extensive network of petroleum product and natural gas pipelines in the Los Angeles Basin. There are also offshore submarine pipelines that service the offshore facilities in the Sector Los Angeles – Long Beach Captain of the Port Zone. A portion of this pipeline network travels the coast parallel to the coastal freeway in ACP 4. The pipeline right of way is in a rural area without discharge detection capabilities. If the computer supervisory control and data acquisition system fails, there could be a discharge from a pipeline that is not easily detected until the product reaches the water. The largest foreseeable WCD from this type of pipeline would be approximately 10,000 bbls. This WCD scenario was selected based on projected discharge volume, proximity to shorelines, areas of environmental and/or economic sensitivity, and marine and shoreline resources.

Santa Barbara and Ventura Counties have been identified as the most probable/greatest threat of impact in the event of this WCD. Channel Islands National Marine Sanctuary will also be impacted. Channel Islands National Marine Sanctuary contains a diverse habitat which protects endangered species, hosts innovative research and conservation, award-winning learning and volunteer programs, and archaeological remains can all be found in this area.

Marine Spill Response Corporation (MSRC) will be utilized for on-water containment and recovery of spill. MSRC response equipment, major equipment lists, equipment locations, and the temporary storage capability is provided on their website via hyperlink in Section 5210.1. Shoreline and onshore cleanup will be provided by Patriot Environmental and NRC Environmental Services (NRC), equipment lists and locations are provided via hyperlink in Section 5210.1.

Upon notification of a release and mobilization of the response, either a fixed-wing aircraft or helicopter would be dispatched as promptly as possible to conduct visual surveillance at the spill source. The surveillance could be accomplished through use of vessels as well. Recovery strategies will include attempting to skim free-floating oil utilizing available OSRO Oil Spill Response Vessels (OSRVs), Oil Spill Response Barges (OSRBs), Vessels of Opportunity (VOO), Quick Strike OSRVs, and Temporary storage associated with the identified skimming and recovery. As with any large spill, additional cascading response equipment would be mobilized to the site from various OSRO bases outside the area. A response could consist of simultaneous operations of containment booming, mechanical recovery, and shoreline cleanup. When recovery is necessary, the following strategies will be implemented:

- Mobilize resources to secure the breach in the pipeline
- Mobilize mechanical recovery resources, including vessels (both OSRVs and VOOs), barges, booming, skimming equipment, and spotter/surveillance aircraft. Begin deploying mechanical recovery resources as close to the source as possible to contain and collect concentrated oil in a timely and effective manner.

- Mobilize equipment with remote sensing technologies (radar, infrared camera) to aid in night time operations and slick tracking. Remote sensing technologies assist recovery operations in identifying thick areas of oil to enhance recovery rate;

- Mobilize Shoreline Cleanup and Assessment Technique teams to impacted and potentially impacted areas.

- Activate the Oiled Wildlife Care Network. There will be a significant wildlife impact.

- Volunteer coordination should be addressed early in the response. There will be self-activated volunteers.

- Maintain an effective and well-coordinated response effort to control the source of the discharge up to the point when the Federal On-Scene Coordinator determines the response effort complete.

Rail – Worst Case Discharge

The Ports of Los Angeles and Long Beach do receive crude by rail on a limited basis. There are two crude oil rail terminals in the Los Angeles – Long Beach Port complex. The rail lines do cross the Los Angeles River and the Dominguez Channel. A derailment of tank cars over or near the Los Angeles River and the Dominguez would present the WCD for rail transport. With the limited exposure to navigable waterways, the largest foreseeable discharge in this scenario would be the entire contents of three rail tank cars which would equal approximately 2150 bbls.

The Marine Transportation System in the Ports of Los Angeles and Long Beach have been identified as the most probable/greatest threat of impact in this scenario. The Golden Shore Marine Reserve and the Long Beach Harbor Breakwater are the closest environmentally sensitive sites that may require protection.

Patriot Environmental could be utilized for on-water containment and recovery of spills. Patriot Environmental response equipment, major equipment lists, equipment locations, and the temporary storage capability is provided on their website via hyperlink in Section 5210.1. Patriot Environmental has demonstrated its ability to meet the daily recovery capability standards of 18,500 bbl/day within 6 hours, 25,000 bbl/day within 24 hours, and 62,500 bbl/day within 60 hours.

Upon notification of a release and mobilization of the response, aerial surveillance assets should be deployed as promptly as possible to conduct visual surveillance at the spill source. Recovery strategies will include attempting to skim free-floating oil utilizing available OSRO Quick Strike OSRVs, Vessels of Opportunity (VOO), and Temporary storage associated with the identified skimming and recovery. A response could consist of simultaneous operations of containment booming, mechanical recovery, and shoreline cleanup. When recovery is necessary, the following strategies will be implemented:

- Mobilize mechanical recovery resources, including vessels (both OSRVs and VOOs), barges, booming, skimming equipment, and spotter/surveillance aircraft. Begin deploying mechanical recovery resources as close to the source as possible to contain and collect concentrated oil in a timely and effective manner.

- Mobilize equipment with remote sensing technologies (radar, infrared camera) to aid in night time operations and slick tracking. Remote sensing technologies assist recovery operations in identifying thick areas of oil to enhance recovery rate.

- Maintain an effective and well-coordinated response effort to control the source of the discharge and recover spilled material up to the point when the Federal On-Scene Coordinator determines the response effort complete.

9500 List of Agreements

A list if Marine Environmental Response and Preparedness Interagency and International Agreements can be found in Enclosure (2) to the Marine Environmental Response Manual, COMDTINST M16000.14A.

9600 Conversions

Conversions can be found at www.conversiontables.info/.

9700 List of Response References

9710 Relevant Statute/Regulations/Authorities List

A brief description of these statutes/regulations along with Coast Guard responsibilities is available in Chapter 2 of the Marine Environmental Response Manual, COMDTINST M16000.14A.

Federal Water Pollution Control Act (FWPCA) of 1972 as amended by the Clean Water Act (CWA).

Oil Pollution Act of 1990

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

National Oil and Hazardous Substances Pollution Contingency Plan (NCP)

Resource Conservation and Recovery Act (RCRA)

Clean Air Act, as amended (CAA)

Occupational Safety and Health Act of 1970

Endangered Species Act of 1973 (ESA)

Migratory Bird Treaty Act (MBTA)

Marine Mammal Protection Act of 1972, as amended (MMPA)

Coastal Zone Management Act of 1972, as amended (CZMA)

Intervention on the High Seas Act of 1974 (IHSA)

National Historic Preservation Act of 1966, as amended (NHPA)

9720 Relevant Instructions/Guidelines/Standard Procedures and Practices List

Marine Environmental Response Manual, COMDTINST M16000.14A

9730 Geographic Response Strategies

Geographic Response Strategies are located in Section 9800/Volume II of this Appendix/ACP.

9740 Technical References List

9740.1 NCP Product Schedule

The National Contingency Plan Product Schedule is located on the EPA website via the following link:
https://www.epa.gov/sites/production/files/2019-04/documents/schedule.pdf

9740.2 Catalog of Crude Oil and Oil Product Properties

Environment Canada (US EPA counterpart) maintains a database of Crude Oil and Oil Product Properties at the following website:
http://www.etc-cte.ec.gc.ca/databases/OilProperties/oil_prop_e.html

9740.3 Chemical Hazards Response Information System (CHRIS) Manual

The Coast Guard no longer maintains the CHRIS Manual.

9750 Environmental Response Sampling Guidance

This section intends to describe the environmental response sampling that may occur during an emergency response to an oil spill or hazardous materials release. Persons performing sampling should also refer to their specific agency or laboratory protocols and procedures for detailed information for executing sampling appropriately.

Sampling during an incident can be a highly complex and variable activity that requires specific field and laboratory methods for each type of sample. A detailed, accurate chain-of-custody must be completed for all samples to be considered valid. The term sampling and samples includes collecting physical materials, surveys, and all required documentation, etc. All types of sampling should be done with an incident-specific plan that includes a workable data management plan for the scale of the incident or incident phase.

Sampling and ICS

The Unified Command may require the Environmental Unit to produce a Sampling Plan for the coordinated collection, documentation, storage, transportation and sample submittal to appropriate laboratories for analysis and/or storage. The NOAA Scientific Support Coordinator (SSC) will coordinate the development of sampling plans with agency and industry technical specialists and the NRDA Trustees as appropriate. The plan will be executed by Planning Section and Operations Section staffs. Additionally, when a Sampling Plan is needed, it should be prepared so that sample collection activities, sample documentation, and sample nomenclature are defined and standardized across all parties performing the activities. Note that there may not be existing procedures for the types of sample collection being performed. Dependent upon the scale of sampling needed, a Quality Assurance Strategy may also be needed to tie in the data objectives from the sampling efforts with the analytical activities that are performed. This includes specifying the frequency and type of field and laboratory quality control samples that will be collected. In the initial stages of a response incident, decisions should be focused on what information will be needed by those personnel evaluating analytical data and making decisions from the collected data.

Sampling Purpose

During the initial phase of an incident, sampling will focus primarily on:

1) determining the pollution source or product being released,

2) determining the extent of the product in the environment,

3) determining background data for comparison to current conditions.

Environmental response sampling may be conducted for human health and safety, response decision making, natural resource damage assessments (NRDA), etc. Plans for those purposes will usually be developed by specialists in those fields.

Sampling that is part of a criminal investigation is separate from the sampling conducted for the response. Response personnel need to collect their own samples because the results from samples collected as part of a criminal investigation are typically sealed and not available for use by response personnel.

Sampling Strategy

A source sample should be taken as close to the discharge or release point as safe and practical. This provides for the least weathered or diluted sample of the product being discharged or released into the environment. This sample will be used for many purposes, including product identification and chemical composition, and will act as the standard that other samples are compared against. A background sample should be taken in an unaffected area to determine a baseline that existed prior to the discharge or release. This should include water, sediment/soil, air, and biota samples.

The agencies that could be involved with sampling for an incident that occurs within the scope of this Area Contingency Plan include: U. S. Coast Guard, Environmental Protection Agency, National Oceanic and Atmospheric Administration, Department of the Interior, U.S. Fish and

Wildlife Service, California Department of Fish and Wildlife Office of Spill Prevention and Response, Academia, NRDA Trustees.

Sampling Considerations

There are many factors to consider that are important to the overall effectiveness of the laboratory analysis. One critical factor is weathering. Evaporation, dissolution, oxidation, and biodegradation are some of the weathering processes that alter petroleum fingerprints. The degree to which these factors affect individual samples collected cannot be predicted. A sample may not be useful for conclusive analysis if severe weathering has occurred. Rapid response to spills, proper sample storage, and prompt shipment of samples to the laboratory can greatly reduce the effects of weathering.

Cross contamination is another area of concern. Hazardous chemicals, sewage, and other substances in the environment may interfere with the petroleum fingerprint. A note should be made on the sample documentation if the sampler suspects such cross contamination may be present so the analyst can account for it during analysis.

The selection of sampling supplies is important to reduce the introduction of non-petroleum contamination to the samples by the investigator. Oil samples should not be in contact with plastic. A 4" x 4" PTFE pad should be used whenever feasible to collect swipe samples, traditional sorbent material typically contaminates an oil sample.

Because of their configuration, a vessel's bilge often has spaces where oil can become trapped. These spaces do not allow oil to mix thoroughly with the rest of the bilge, and therefore, oil in one space may have a different fingerprint than oil in another space. Homogeneity may also be a concern with large waste pits. Every effort should be made to sample multiple spaces and locations whenever non-homogenous sources are sampled.

Careful consideration should be given to the makeup of the sampling team. When appropriate, collaborations with local NGO's or other stakeholders are encouraged in order to increase transparency of sampling efforts. All organizations/agencies involved will have the necessary training, equipment, and background to provide the best sampling plan possible.

Analytical Laboratory Services

In the event that a spill or hazardous substance release occurs and non-routine analytical services are required, a laboratory and back-up laboratory should be identified with the capability, turn-around time, and capacity to perform the desired analyses; meet the defined data analysis objectives; and have the capability to substantiate the reported analytical results by supplying the project- defined full data analysis deliverable and electronic data analysis deliverable. The following laboratories meet this criteria:

U. S. Coast Guard Marine Safety Laboratory

1 Chelsea Street

New London, CT 06320-5500 Phone: (860)271-2704

24 HR: (860)912-8022

California Department of Fish and Wildlife Office of Spill Prevention and Response Petroleum Chemistry Lab

1995 Nimbus Road

Rancho Cordova, CA 95670 Phone: (916)358-2803

https://www.wildlife.ca.gov/OSPR/Science/Petroleum-Chemistry-Lab

Sampling Data Management

During a large-scale incident, the preparation of a data management plan may be needed to define the data collection and reporting processes. The Environmental Unit should identify the database platform that will be utilized to collect all sample and analytical data and define the primary keys for the electronic data deliverable that will be used. All sampling teams will be required to meet the data management plan in order to supply field-collected data and analytical data, respectively. Additionally, the location of where, when, and how the data was collected should be made available.

Elements of a Sampling and Monitoring Plan

The following outline illustrates the most commonly used elements of a sampling and monitoring plan. It is not expected for an actual plan generated during an incident to copy the outline below:

- Introduction and Purpose
- Field Equipment
- Monitoring
  Target Analyses and Detection Limits
  Fixed Real-Time Monitoring Locations
  Mobile Platforms for Monitoring
- Sampling

  Safety/PPE
  Sampling Procedures
  Sample Preservation
  Sample Labels Chain of Custody
  Shipping and Handling of Samples
  Holding Times for Samples