California State Oil Spill Contingency Plan

PREPARED BY:

California Department of Fish and Wildlife
Office of Spill Prevention and Response

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This Plan is also available on the internet at:

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=172767&inline

See also, the Region IX Regional Contingency Plan at:

https://www.nrt.org/site/doc_list.aspx?site_id=114

California State Oil Spill Plan Update 2023

Summary

Beginning in 1990, the Administrator of the Office of Spill Prevention and Response has been required to periodically submit to the Governor and the Legislature an amended California State Oil Spill Contingency Plan. Statutory amendments in 2010 added a due date for the State Oil Spill Contingency Plan update by January 1, 2013, and every three years thereafter. The last July 2019 revision was published ahead of the January 2020 deadline. This 2023 revision provides legislative, regulatory, and programmatic updates since the most recent version, including new and updated information on Non-floating Oils, renewable fuels, and Spill Management Teams. This Plan also includes revisions and enhancements to clearly communicate how state government mobilizes and responds to oil spills in coordination with partners in all levels of government, tribes, the private sector, and non-profit organizations.

Specific Updates in the 2023 Revision:

- Solicited and incorporated input from OSPR Subject Matter Experts and external/other agency staff
- Updated legislative and regulatory references
- Updated links, phone numbers, and contact information
- Included new sections on Non-floating Oils and Spill Management Teams
- Updated Section 5- Applied Response Technologies Section
- Revised formatting for plan-wide consistency and ease of editing, reviewing, and navigating

TABLE OF CONTENTS
CALIFORNIA STATE OIL SPILL CONTINGENCY PLAN

SECTION 1 – Oil Spill Reporting and Notification

1.0 Oil Spill Reporting Requirements

Without regard to intent or negligence, any person responsible for the discharge or threatened discharge of oil into waters of the state must report the discharge immediately to the Office of Emergency Services [GC §8670.25; HSC §25510].

Also, a local agency or state agency responding to an oil spill must notify the California State Warning Center if the spill has not yet been reported [GC §8670.26].

What to Report – *Unauthorized* Releases of Oil:

- Any amount into or that could enter state waters – inland, marine, or groundwater
- Any amount into a storm drain or onto city and county streets if there is a significant present or potential hazard to human health and safety, the environment, or property
- Any amount onto state highways and freeways if there is a significant present or potential hazard to human health and safety, the environment, or property
- Any amount onto land (except for certain San Joaquin Valley oil fields) if there is a significant present or potential hazard to human health and safety, the environment, or property
- 5 barrels or more *uncontained* in certain San Joaquin Valley oil fields - if no threat to state waters; 10 barrels or more *contained* in certain San Joaquin Valley oil fields - if no threat to state waters (see Dept. of Conservation Geologic Energy Management Field Rules: https://www.conservation.ca.gov/calgem/field_rules)

Intentionally false or misleading reports may be a crime [PC §148.3; HSC §25515; GC §8670.64].

California Law consists of 29 codes, covering various subject areas. California laws currently in effect can be found at: http://leginfo.legislature.ca.gov/faces/codes.xhtml

Who to Call:

- **State – California State Warning Center... (800) 852-7550 or (916) 845-8911**
- **Federal – National Response Center……. (800) 424-8802 or (202) 267-2675**
- **Local Government…….…… 911 *or other designated local number***

The person or party responsible for an oil spill, referred to as the Responsible Party (RP) herein, must report the spill to the California State Warning Center and the National Response Center (by federal law) for OSPR approved contingency plan holders. The RP may have other reporting obligations, such as by statute, regulation, or permit conditions.

When to Call:

- Immediately upon learning of the release when it can be done safely [19 CCR §2631].

- If the RP has a contracted Oil Spill Response Organization (OSRO), a Qualified Individual (QI), or Spill Management Team (SMT), the RP should contact them within 30 minutes of learning of the release [GC §8670.25.5; 14 CCR §817.02(g), §817.03(g), §817.04(h), §818.02(h), §818.03(h), §827.02(d)].

Spill Status Updates:
If the estimated amount of oil spilled or the volume at immediate risk of spilling significantly changes, that information must be reported to the California State Warning Center. Companies with contingency plans approved by OSPR must provide additional update calls not less than every 12 hours within the first 48 hours of response. However, the State On-Scene Coordinator or Federal On-Scene Coordinator (SOSC/FOSC), through the Unified Command (UC), may increase or decrease this timeframe, as appropriate. Updated spill volume information included in the Incident Action Plan (IAP) developed through the UC may meet this requirement [14 CCR §817.02(g), §817.03(g), §817.04(g), §818.02(h), §818.03(h), §827.02(d)].

If any other information that was initially reported about the incident was inaccurate or incomplete, this information should be promptly updated with the California State Warning Center and the National Response Center.

For additional information, see these Governor's Office of Emergency Services (Cal OES) reporting guides, found at http://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/spill-release-reporting:

- Cal OES Spill Release Reporting Notification Guidance: https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf
- Release Reporting Matrix: https://www.caloes.ca.gov/FireRescueSite/Documents/Release%20Reporting%20Matrix.pdf
- Summary of Spill Release Laws and Regulations: https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/Petroleum-Fact-Sheet.pdf

Additional References: HSC §25510; 19 CCR §2631; WC §13272; GC §§8589.7, 8670.25.5; 14 CCR §§817.02(g), 817.03(g), 817.04(g), 818.02(h), 818.03(h), 827.02(d); PRC §3233; 14 CCR §1722; GC §51018; VC §23112.5

1.1 Notification to State Agencies

Upon notice of a potential oil spill, the California State Warning Center, the National Response Center, or 911 will contact appropriate federal, state, and local agencies [GC §8589.7, §8670.25.5(b)]. Some laws and regulations specifically identify which agencies Cal OES must notify in the event of a specific type of release.

California Department of Fish and Wildlife (CDFW), Office of Spill Prevention and Response (OSPR)
Serves as SOSC for marine and inland surface water oil spills and is responsible for wildlife and habitat.
OSPR Spill Desk: (916) 341-6957

California Highway Patrol (CHP)
Serves as the SOSC to oil spills on highways, and certain other roads.
For non-emergencies 1-800-TELL-CHP

California Department of Conservation, Geologic Energy Management Division (CalGEM)
Oversees oil, gas and geothermal drilling, production, and plugging and abandonment operations. District contact information is located here:
https://www.conservation.ca.gov/calgem/Pages/calgem_contacts.aspx

Office of the State Fire Marshal (OSFM), Pipeline Safety Division (PSD)
Has safety regulatory and enforcement authority over intrastate oil and hazardous liquid transportation pipelines.
For questions: (562) 497-0350
Directory: https://osfm.fire.ca.gov/media/x3dfgvl0/psd-phone-dir.pdf

Department of Toxic Substances Control (DTSC)
Oversees the emergency removal of hazardous waste.
24-Hour Toxics Hotline: (916) 255-6504 and (800) 698-6942

State Lands Commission (SLC)
Manages state land and oversees marine oil terminal operations.
Directory: https://www.slc.ca.gov/contact-us/

Regional Water Quality Control Boards (RWQCB)
Monitors beneficial uses of waterways, ambient water quality, and surface and groundwater contamination.
Directory: https://www.waterboards.ca.gov/about_us/contact_us/rwqcbs_directory.html

Department of Public Health (CDPH)
Monitors emergency water, food, and medical supplies.
Duty Officer: (916) 328-3605

Office of Environmental Health Hazard Assessment (OEHHA)
Evaluates potential public health risks associated with seafood consumption (following oil spills into state waters).
Directory: https://oehha.ca.gov/about/contact-us#

Air Resources Board (ARB)
Monitors ambient air quality in collaboration with local air districts.
Air Pollution Complaints: (800) 952-5588

California Coastal Commission (CCC)
Manages the conservation and development of California's coastline (excluding San Francisco, San Pablo, and Suisun Bays).
Directory: https://www.coastal.ca.gov/contact/#/

San Francisco Bay Conservation and Development Commission (BCDC)
Oversees development within San Francisco, San Pablo, and Suisun bays and the shoreline.
Directory: https://bcdc.ca.gov/contact.html

1.2 Notification to Federal Agencies

Upon notice of a potential spill, the California State Warning Center, the National Response Center, or 911 will contact appropriate federal, state, and local agencies [GC §8589.7, §8670.25.5(b)]. Some laws and regulations specifically identify which agencies the National Response Center must notify in the event of a specific type of release.

US Coast Guard (USCG) – District 11
Serve as FOSC for pollution response actions in the coastal zone of California; controls navigable waterways; have access to cleanup funding.
Sector San Francisco: (415) 399-3547
Sector Los Angeles/Long Beach: (310) 521-3801
Sector San Diego: (619) 683-6470

US Environmental Protection Agency (US EPA), Region IX
Serves as FOSC for inland oil spills; oversees response actions for discharges of oil into the inland zone; provides limited Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) pre-declaration assistance for oil spill assessment and cleanup.
SARA Title III, Emergency Planning and Community Right-to-Know Act (EPCRA): (800) 424-9346
Regional 24-Hour Hotline: (415) 227-9500

National Oceanic and Atmospheric Administration (NOAA)
Provides federal scientific support with Scientific Support Coordinators.
24-Hour Hotline: (206) 526-6317

Department of the Interior (DOI), Office of Environmental Policy and Compliance, Regional Environmental Officer (REO):
Coordinates Spill Response in Region IX; provides notification for large spills to DOI trustees; provides for protection of DOI trust resources including migratory birds, threatened and

endangered species, DOI lands and other natural and cultural resources; organizes mobilization of DOI assets.
REO contact: (415) 420-0524

Federal Emergency Management Agency, Region IX (FEMA)
Administers the Federal Disaster Assistance Program; supports State response efforts after a declaration of an emergency; provides funding for spill response efforts.
24-Hour Duty Officer: (510) 627-7250

Agency for Toxic Substances and Disease Registry (Department of Health & Human Services)
Assesses public health threats.
24-Hour Hotline: (404) 498-0120

1.3 Miscellaneous Contacts

CHEMTREC - Chemical Transportation Emergency Center
Provides emergency information for chemical releases and fire control measures, assistance with chemical identification, and notification of manufacturer and/or shipper.
24-Hour Hotline: (800) 424-9300

Poison Control Centers
Provides poison/exposure information to emergency personnel and the public and has regional hospital capabilities for exposed victims. Calls are automatically forwarded to the nearest center: Sacramento, San Francisco, Fresno, and San Diego.
24-Hour Hotline: (800) 876-4766

1.4 Emergency Funding Sources

At larger spills, funding is typically managed by the Finance Section Chief in the Incident Command System, who is often a Responsible Party (RP) representative. If the RP is unknown, unwilling, or unable to provide an adequate response, a government agency may have to arrange for abatement and mitigation of the oil spill (see Section 12 herein). However, initially the discharger should be asked if they will initiate and pay for timely cleanup.

Surface Water - National Pollution Funds Center, US Coast Guard
NPFC Claims Adjudication Division, Oil Spill Liability Trust Fund

Surface and Groundwater - State Water Resources Control Board
Water Pollution Cleanup and Abatement Account

Surface Water, Fish, Wildlife, and Habitat - Department of Fish and Wildlife (CDFW)
Fish & Wildlife Pollution Account

Surface Water – CDFW Office of Spill Prevention and Response
Oil Spill Response Trust Fund

Environment or Illegal Drug Labs - Department of Toxic Substances Control
Emergency Reserve Account
Illegal Drug Lab Cleanup Account

SECTION 2 - Introduction

2.0 Background and Authority

The Governor is required to establish a state oil spill contingency plan [GC §8574.1-.15; GC §8670.5; and GC §8670.7]. Beginning in 2010, the Administrator of the Office of Spill Prevention and Response (OSPR) is required to submit to the Governor and the Legislature an amended California Oil Spill Contingency Plan (Plan) every three years. The Plan must address oil spill contingency planning for both marine and inland surface waterways and terrestrial environments [GC §8574.8]and provide for the best achievable protection of the waters of the state [GC §8574.7].

The OSPR Administrator is required to implement this Plan [GC §8670.7].

2.1 Purpose

This Plan is an independent document generally describing the state's response to discharges of oil to all marine or inland surface waterways of California. This version of the Plan supersedes all previous California state oil spill plans.

Where an incident may involve oil and/or a chemical release, an assessment will be made to determine whether to respond to the incident primarily as an oil spill or primarily as a chemical release. In planning for a mixed chemical release the California *HazMat Tool Kit* and the *Hazardous Materials Incident Contingency Plan* should be referenced, not this Plan.

- HazMat Tool Kit and Hazardous Materials Plan: https://www.caloes.ca.gov/office-of-the-director/operations/response-operations/fire-rescue/hazardous-materials/hazmat-publications/

2.2 Implementation Authority for this Plan

All state and local agencies should be familiar with this Plan in the context of their respective codified jurisdiction and authority.

All state and local agencies must carry out spill response activities consistent with this Plan and other applicable federal, state, or local spill response plans [GC §8670.27(a)(2)].

Private vessel and facility oil spill response plans must be consistent with this Plan and the National Response Framework [GC §8670.28-.29; see also https://www.fema.gov/media-library/assets/documents/117791].

SECTION 3 – Primary Authority for Oil Spill Response

3.0 General Summary

This section sets forth the roles and responsibilities of those State agencies with primary authority for oil spills in California. Oil spill incidents often involve a response from multiple agencies having different jurisdictional authorities, capabilities, and functions. In some circumstances, the jurisdictional mandates of several agencies may overlap. Use of the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) to organize spill response ensures that inter-agency responsibilities are collectively addressed.

3.1 Oil Spills In or Threatening State Waters

Surface Waters
The OSPR Administrator has the primary authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill into marine and inland surface waters of the state, but not groundwaters [GC §8670.7(a), §8670.62; FGC §5655(d)]. OSPR's planning, preparedness, and financial responsibility programs apply to certain activities posing a risk to marine waters and inland waters.

The Administrator serves as the SOSC, which means he or she has the overall authority for managing and conducting incident operations during the response to the oil spill, including decisions regarding in-situ burning, dispersants, and cleanup agents [FGC §5655(e)(2); GC §8670.7]. Also, the Administrator represents the State in any coordinated response efforts with the Federal government [GC §8670.5] The Administrator is California's representative on the federally organized Region IX (Arizona, California, and Nevada) Regional Response Team (RRT) for surface water pollution (see the index in the Region IX Regional Contingency Plan (RCP) §1002.03.2; https://www.nrt.org/site/doc_list.aspx?site_id=114)as well as the Pacific States/British Columbia Oil Spill Task Force [GC 8670.9].

Incident management generally includes the development of objectives, strategies and tactics, the ordering and release of resources, and coordination with other appropriate response agencies to ensure that all resources are properly utilized and that this coordinating function is performed in a manner designated to minimize risk to other persons and to the environment [FGC §5655(e)(2)].

Oil spills occurring in waters outside of the state (e.g., from a vessel offshore or that may flow in a river from Oregon, Nevada, Arizona or Mexico) will be monitored by OSPR if wildlife or habitat resources may be threatened. If an oil spill in Mexican maritime waters threatens California, the bi-national *MEXUS Plan* applies with the USCG 11th District as lead (see https://www.nrt.org/site/doc_list.aspx?site_id=114%20%20). If an oil spill on the inland border

with Mexico threatens California, the US-Mexico Joint Contingency Plan for Chemical Incidents in the Inland Border Region applies with US EPA as lead. See: https://www.epa.gov/sites/production/files/2016-01/documents/us_mexico_joint_contingency_plan.pdf

Additional authority for cleanup direction for oil spills that threaten state waters may come from Regional Water Quality Control Boards (RWQCBs). The mission of the RWQCB is to develop and enforce objectives and implementation plans that will best protect the State's overall water quality – surface water and groundwater – recognizing local differences in climate, topography, geology, and hydrology. Each RWQCB develops a "Basin Plan" for their hydrologic areas, issues waste discharge requirements, takes enforcement action, and monitors water quality.

Groundwater
Generally, the applicable RWQCB directs cleanup of groundwater pollution and spills to land that threaten groundwater. The California Department of Fish and Wildlife (CDFW) could be involved if wildlife was impacted or at risk or if spills to groundwater may potentially impact surface waters. Oil spills threatening or impacting groundwater are likely to result in long-term remediation projects.

3.2 Oil Spills on Land (No Potential Release to State Waters)

Authority for incident management of oil spills that do not threaten State waters may come from various local and State agencies, depending on the nature of the spill:

- The Geologic Energy Management Division (CalGEM) is the principal State agency responsible for regulating all oil, gas, and geothermal production operations within the territorial boundaries of California (doesn't include offshore platforms past 3 miles). In the event of an oil spill from a drilling rig or producing facility, CalGEM is responsible for determining the appropriate actions to be taken to control and secure the source. The State Oil and Gas Supervisor has the authority to determine that an emergency exists. When a pollution incident occurs, CalGEM may send a district representative to advise the Incident Commander (IC) on corrective or mitigative actions.

- The Department of Toxic Substances Control (DTSC) provides technical advice regarding the safe handling and suitable disposal of toxic materials. DTSC assists in the assessment, evaluation, and control phases of hazardous material incidents. DTSC brings equipment, technical and field personnel, toxicologists, and chemists, and assists in data collection. DTSC maintains an Emergency Reserve Account for hazardous material incidents to assist local governments and public agencies. The DTSC designates locations for the disposal of hazardous waste and issues emergency identification numbers for non-responsible party incidents.

- The Office of the State Fire Marshall (OSFM) has the authority to respond to and investigate ruptures, fires, or similar incidents, involving intrastate hazardous liquid pipelines.

- CDFW could be responsible for determining when cleanup actions have mitigated impacts or potential impacts on wildlife and habitat.

- Local Certified Unified Program Agencies (CUPAs), which are typically local fire departments or environmental health departments, have additional authorities to respond. When a spill occurs outside the jurisdiction of State and Federal agencies, the response falls to the CUPA.

3.3 Oil Spills on Highways and Roads

Local Roads
In the absence of local codes, ordinances, or agreements to the contrary, the IC for an oil spill on a local roadway is vested in the appropriate law enforcement agency having primary traffic investigative authority on the roadway where the incident occurs. Generally, in cities this will be the local police department, and in the unincorporated areas of a county it will be the sheriff's office [VC §2454]. However, the governing body may assign this responsibility to the local fire protection agency.

Responsibility for the IC at the scene should continue until all emergency operations at the scene have been completed. However, this coordinating function does not include directing how the specialized functions of other responding agencies are to be performed. The IC should consult with other response agencies at the scene to ensure that all appropriate resources are used properly, and should perform this coordinating function in a manner designed to minimize the risk of injury to persons [VC §2454].

State Highways
The California Highway Patrol (CHP) performs the SOSC role for oil spills on state highways. CHP acts as the statewide information, assistance, and notification coordinator for all oil spill incidents occurring on highways within the State of California. CHP is required to establish a single notification mechanism for a spill response system for these spills [VC §2453; RCP §1002.03.2].

3.4 Oil Spills Involving Railroads

If there is an oil spill from a railroad that involves a fire or other public health issue, then the appropriate fire or public health response agencies will manage those aspects of the incident. If on-water oil spill cleanup can occur separate from the fire or other public health issues, then OSPR will coordinate those response efforts, all within a UC. Once the fire and public health concerns have been addressed, OSPR will assume command for the remaining

on-water oil spill cleanup, mitigation, and restoration efforts. If there are no impacts to waterways, then other agencies such as DTSC, a RWQCB, or local agency will oversee long-term soil cleanup.

There is a Regional Railroad Accident Preparedness and Immediate Response (RRAPIR) Force, created in Cal OES. The RRAPIR Force is responsible for providing regional and onsite response and mitigation capabilities for fire and public health in the event of a release of hazardous materials from a rail car or a railroad accident involving a rail car. The RRAPIR Force is also responsible for implementing the state regional railroad accident preparedness and immediate response plan for releases of hazardous materials from railroad accident involving a rail car [GC §8574.30 *et seq.*].

There is also a Railroad Accident Prevention and Immediate Deployment (RAPID) Force within the California Environmental Protection Agency. Although very similar in mandate and structure to the RRAPIR Force, which is focused just on rail, the RAPID Force is focused on large-scale releases of toxic materials resulting from all surface transportation accidents [PUC §7718].

SECTION 4 – Response and the Nature of Oil

4.0 General Summary

Since 1996, all California state agencies have been required to use a Standardized Emergency Management System (SEMS) for emergency response activities [GC §8607]. SEMS components include the Incident Command System (ICS), multi-agency coordination, and mutual aid agreements. Local agencies must follow SEMS in order to be eligible for reimbursement from available state funds for their costs incurred during emergency response.

In 2011, a Presidential order directed federal agencies to use the National Incident Management System (NIMS -- see Presidential Policy Directive / PPD-8: National Preparedness). NIMS was developed by the Department of Homeland Security (US DHS) to ensure all levels of government across the nation have the capability to work efficiently and effectively together, using a national approach to domestic incident management. The US Coast Guard (USCG) and the US Environmental Protection Agency (US EPA) each publish an Incident Management Handbook (IMH) as a guidance document to assist response personnel with organizing the IC at a pollution incident [COMDTPUB P3120.17 series]. In 2005, Governor Schwarzenegger directed state agencies to use NIMS (see California Executive Order S-2-05). Currently, Cal OES is responsible for coordinating and monitoring California's overall statewide integration of SEMS and NIMS. The IMHs should be used for pollution incidents; this ensures a coordinated, effective response with USCG or US EPA representatives and RP representatives.

The most important element of SEMS/NIMS is ICS. ICS organization consists of five primary management sections: Command, Planning, Operations, Logistics, and Finance. The system can grow or shrink to meet incident needs and be applied to a wide variety of emergency and non-emergency situations. As shown in Figure 1, each of the primary ICS sections may be sub-divided as needed. A basic ICS operating guideline is that the person at the top of the organization is responsible for a given task until the task needs to be delegated to another person. Some positions within these sections may be filled by representatives of the RP. However, the Environmental Unit Leader, the Shoreline Cleanup Assessment Technique (SCAT) Technical Specialist, the Resources at Risk (RAR) Technical Specialist, the Applied Response Technology (ART) Technical Specialist, and the GIS Technical Specialist within the Planning Section and Wildlife Branch Director (WBD) within the Operations Section will be filled by either a state or federal agency with trustee authority for wildlife and habitat resources. Additionally, the Documentation Unit Lead position will be filled by either a state or federal response agency to ensure retention and completion of adequate documentation supporting response actions and decisions.

Thus, for small spills the IC or UC will directly manage all aspects of the incident organization, with perhaps the assistance of a few other people. However, larger incidents usually require

that each section be staffed by multiple individuals in order to better manage and implement the response activities.

Additional NIMS and SEMS information is found at:

- http://www.fema.gov/national-incident-management-system
- http://www.regulations.gov/#!documentDetail;D=FEMA-2009-0014-0002
- http://a13002.uscgaux.info/pdf/USCG%20NIMS-NRP%20Implementation%20Plan.pdf
- https://www.caloes.ca.gov/office-of-the-director/operations/planning-preparedness-prevention/planning-preparedness/
- https://homeport.uscg.mil/Lists/Content/DispForm.aspx?ID=2923&Source=/Lists/Content/DispForm.aspx?ID=2923

General ICS Organizational Structure:

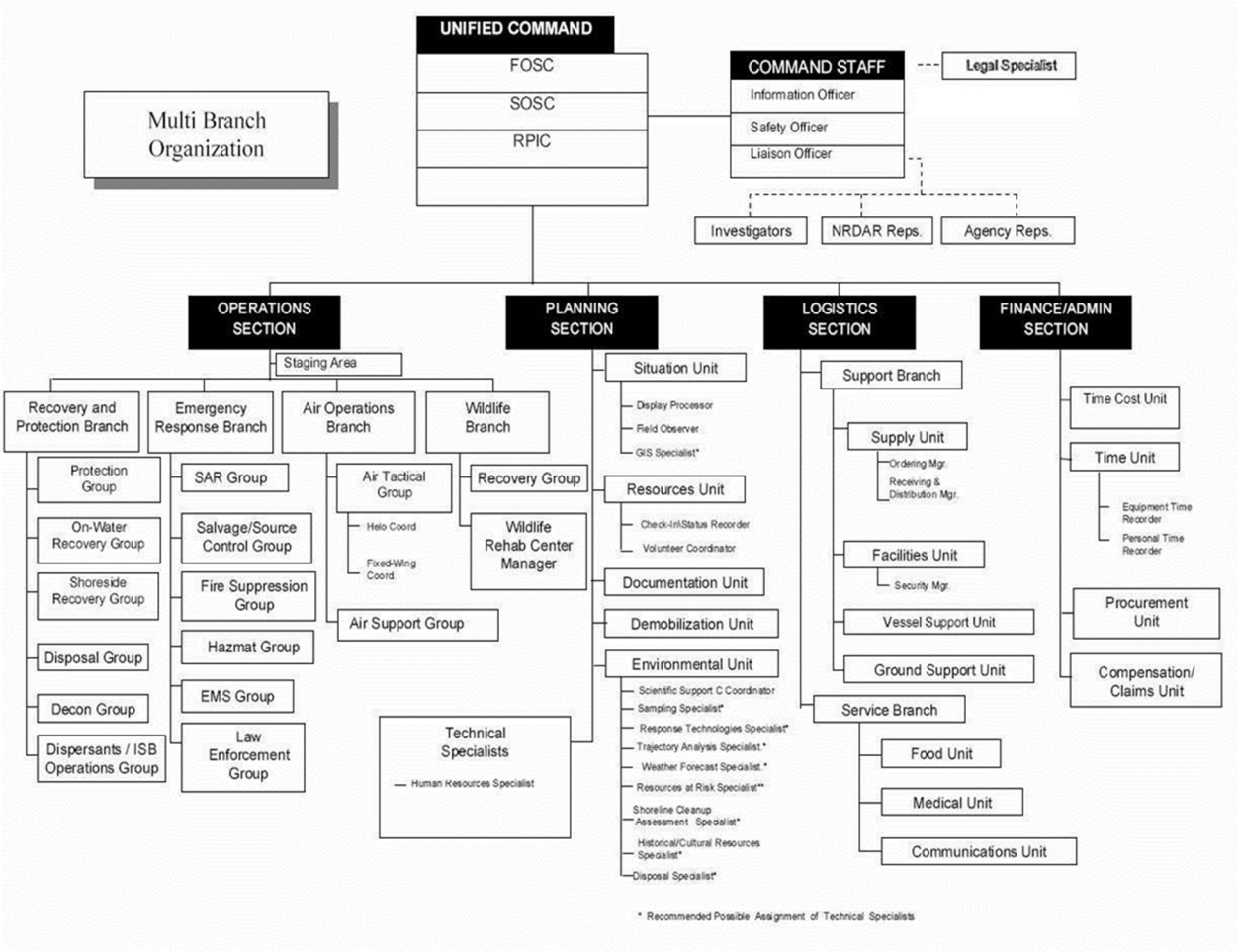

Figure 1

4.1 Discovery and Notification

A spill usually becomes known to an agency by:

- A report made by a person or party responsible for or involved in the spill
- A report made by a member of the public
- A report made by government agency personnel who discover the spill during patrols or inspections

A list of agencies to be notified in the event of an oil spill is contained in Section 1 of this Plan.

4.2 Preliminary Assessment

The first agency on-scene that has some authority and jurisdiction over the incident should serve as the IC until a representative from an agency with more appropriate jurisdiction arrives.

Ensuring human safety and establishing source control are always the two highest priorities for initial spill response. Containment, removal, and clean-up actions must begin as soon as possible to minimize the impact on natural and economic resources. The RP is expected to undertake these efforts as soon as can be done safely; the RP does not need to wait for a government agency to arrive. The RP should manage the spill as appropriate for the size and characteristics of the incident until the proper governmental agencies arrive on-scene to form a UC.

The RP will be given an opportunity to cleanup the spill, but the federal, state, or local agency with jurisdictional authority may take over direction of the cleanup actions if progress is not satisfactory. The RP will be liable for all costs and damages in either case.

However, if the oil spill could be the result of a deliberate criminal or terrorist act, then normal cleanup activities and procedures may be significantly modified. There may be issues of national security, multi-site vulnerability, or immediate control of similar sites in the region or on a national level. In these cases security and law enforcement agencies will serve as the on-scene coordinators. They will likely initiate actions to prevent additional incidents, collect evidence, ascertain witnesses, and try to identify suspects. Cleanup activities will occur when they can be performed safely and without hindering criminal or terrorist investigations.

4.3 Physical and Chemical Properties of “Oil”

The term "oil" herein is applied to both natural and anthropogenic sources, ranging from crude oil to different grades of refined products and other petroleum products and renewable fuel products (see below). Crude oil is not a uniform substance and its properties vary widely from one location of origin to another. Because of this fact, the large number of

refined petroleum products used, and the increase in use of renewable fuels, it is difficult to predict the type of oil that might be spilled in marine or inland waters of California. The range includes highly volatile non-viscous products such as gasoline and thick heavy crude oils that are near solid at room temperature.

Renewable fuels generally means any liquid produced from nonpetroleum renewable resources that is used or useable as a fuel, or such liquid that may be blended with other types of fuels. Renewable fuel includes fuels that may contain up to 5 percent petroleum products [GC 8670.3]. OSPR does not regulate the feedstock materials that are used to make a renewable fuel. When spilled, the fate and transport of most renewable fuels in the environment is similar to their petroleum counterparts (e.g., renewable diesel and petroleum diesel are almost identical in their behavior when spilled resulting in similar environmental impacts). However, ethanol is quite different from its petroleum counterpart (gasoline) in that it readily dissolves into water and requires very different response strategies.

Carbon and hydrogen are the most abundant elements in crude oil, accounting for more than 95% of its composition. Crude oil may also contain dissolved gases (including hydrogen sulfide), solids, water, metals, and colloidal particles.

Hydrocarbons are separated from crude oils through distillation and catalyzation processes. The lighter hydrocarbons generally vaporize at lower temperatures. As an example, gasoline would be one of the first products distilled from a crude oil, and lubricating oils are derived from a higher temperature fraction. The majority of compounds that make up residual fuels come from the fraction left behind after most of the lighter fractions are distilled.

The spreading of an oil slick and the subsequent breakup of the oil film, as well as the rates and extent of emulsification, evaporation, and biodegradation processes, are all intimately related to the physical and chemical properties of the spilled oil. The physical and chemical characteristics of oil, which affect its behavior on water and the efficiency of cleanup operations, include density, viscosity, pour point, solubility in water, and changes in these parameters with time (i.e. “weathering”). Physical and chemical properties of oil are measured at a standard or constant temperature and atmospheric pressure. However, the physical properties of oil will vary depending on local environmental conditions and may vary considerably from values reported for "standard" conditions. The methods for dealing with spilled oil should be based on field observations, even when specific published information is available.

For more information, see http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/oil-types.html and http://response.restoration.noaa.gov/about/media/chemistry-oil-spill.html.

4.4 Oil Weathering Processes

Weathering is the loss or transformation of certain components of the oil through a series of natural processes, which begins when the spill occurs and continues indefinitely while the oil remains in the environment. The process of weathering through exposure to sunlight, wind, wave action, temperature changes and other causes, occurs simultaneously with the spreading and movement of an oil slick. Weathering proceeds at a rate which varies according to the type of oil, the substrate involved (e.g., in water, sand, soil, vegetation), and ambient climatic conditions. Weathering rates are not constant throughout the duration of an oil spill and are usually highest following the release and decreasing over time.

Major processes that contribute to the weathering of spilled oil include evaporation, dissolution, photo oxidation, emulsification (mousse formation), and microbial degradation. The lighter and more volatile components of the spilled oil are affected most rapidly. Consequently, the rate of weathering is highly dependent on the type of oil spilled; light crudes and fuel oils typically weather at a much faster rate than heavy crude or heavy fuel oils, which contain a smaller proportion of light fractions.

For more information, see http://response.restoration.noaa.gov/oil-and-chemical-spills/significant-incidents/exxon-valdez-oil-spill/what-weathering.html.

4.5 Movement of Oil on Water

The natural events that take place following an oil spill on water include the spreading out and directional movement of floating oil on the water's surface; the mixing, sinking or suspending of oil in the water column, and its weathering as described above. The behavior of an oil slick is highly dependent on the type of oil spilled, currents and/or river flow rates and on the ambient climatic conditions.

Immediately upon contacting the water surface, oil typically begins to move away from the spill source. It rapidly spreads to a thin layer under the influence of physical and chemical forces. It also begins to drift under the influence of wind and currents or flow rates. Each force dominates at a different time during the life of an oil slick. When oil is first spilled in water it begins to spread by gravity. As the slick gets thinner, the driving force for gravitational spreading decreases and the rate of spreading due to this mechanism is less important. Thicker more cohesive oils will spread less and more slowly than light thin oils.

In large oil slicks in the marine environment, waves will be partially suppressed and wave transport will be reduced. The movement of an oil slick on the surface of marine water is determined mainly by the current and wind velocity in the area. The movement of an oil slick in inland waters is dependent on the current and hydrogeography of the water body as well as wind. Current velocities depend on wind velocities, geographical latitude, eddy velocity, position in the water column, water depth, and proximity to coasts and riverbanks.

Winds can be broadly divided into prevailing winds, which vary over time periods of weeks to seasons, and short-term winds which vary over time periods of hours to weeks. Rapidly varying winds, such as gusts, which vary over time periods of seconds to minutes, can also play a role in the movement of oil and their associated volatile fumes.

When wind opposes water currents or flows in different directions they can interact in a complex manner. In most models of oil slick drift, the oil is assumed to drift with approximately the same velocity and direction as the surface currents. When wind and water current are not in the same direction, each tends to drive the slick in a different direction at a different speed.

There are a number of oil spill trajectory models suitable for use in California. OSPR relies on support from NOAA for updated trajectory forecasts with current meteorological, oceanographic, and other hydrological data, rather than duplicating NOAA resources and efforts.

4.6 Non-floating Oil

Non-floating Oil (NFO) is defined as a Group 5 oil as defined in section 155.1020 of Title 33 of the Code of Federal Regulations, including any Group 5 oil that is diluted with a diluent for transport [GC §8670.3]. This definition is focused on oils that are heavier than water and naturally will sink. Other oils that naturally float may suspend in the water column or sink to the bottom through mixing with wave energy, through mixing with sediment that adds mass, or through weathering that releases lighter fractions and leaves the heavier fractions. Additional information on NFOs is available here: https://wildlife.ca.gov/OSPR/Legal/Rulemakings/Non-Floating-Oil

In the event of a spill, NFO cannot be effectively cleaned up using conventional surface spill response methods and equipment. Clean up of NFO spills is complicated, costly, and requires different equipment and strategies than a floating or surface spill.

Because of this, entities involved with the transportation and handling of NFOs must have an approved oil spill contingency plan with OSPR that lists an Oil Spill Response Organization (OSRO) that has obtained an NFO "rating" (approval) from OSPR. OSRO's may obtain this rating by demonstrating to OSPR that they have received the Non-floating Oils Classification from the USCG, thus showing that they have the necessary equipment and specialized training to deal with the unique characteristics of a NFO spill. Guidelines for the U.S. Coast Guard OSRO Classification Program are located here: https://homeport.uscg.mil/Lists/Content/DispForm.aspx?ID=55022&Source=/Lists/Content/DispForm.aspx?ID=55022 .

SECTION 5 – Containment, Recovery, & Applied Response Technology

5.0 General Authority

The state Oil Spill Contingency Plan must provide for the best achievable protection of the waters of the state [GC §8574.7]. Additionally, on behalf of the state, the Administrator approves Applied Response Technologies for oil spill response used in surface waters, including in-situ burning, dispersants, and oil spill cleanup agents [GC §8670.7; FGC §5655]. The Administrator also licenses all cleanup agents that might be used in state surface waters [GC §8670.12 to §8670.13.2]. The decision to use certain response methods is coordinated by the Unified Command working with the Operations and Planning Sections during spill response. In some cases, for example for dispersant use in pre-approval areas, unilateral authority rests with the Federal On Scene Coordinator (FOSC).

Best achievable protection is accomplished using various spill response equipment (like industry standard boom and skimmers) and applied response technologies (like oil spill cleanup agent [OSCAs]), and through the approval or "rating" of OSROs and SMTs that deploy and use these technologies and equipment. OSROs and SMTs describe and list what equipment they own and their trained personnel in their applications for a rating (described in Section 14). Generally, the RP is required to arrange for and pay for the equipment, supplies, and staffing needed to cleanup an oil spill, including hiring an OSRO and SMT. Subsections below describe the equipment, strategies, and technologies used to contain and recover oil. For more information, see OSPR's 2016 Report On Best Achievable Technology Prevention/ Mitigation:
https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=139976&inline

5.1 Containment of Oil

Boom is the primary method used to contain, deflect, or exclude oil floating on water. Containment boom is typically classified according to form or location of use and has the following characteristics:

- A flotation unit, or freeboard, designed to contain or divert oil as well as to resist oil splashing over the top
- A skirt, or curtain, to prevent oil from being carried beneath the boom (entrainment)
- A longitudinal strength member (e.g., cable, chain, or high tensile strength fabric) that serves to join boom sections and provide anchoring points, and
- A ballast unit, or weight, designed to hold the boom in place

Containment booming traps floating oil to prevent further spreading and so that it can be collected and recovered using skimmers, pumps, sorbents and other tools. Containment booming is often used in harbors to surround a leaking vessel and contain spilled oil to the area. Deflection booming uses the boom to change the direction of a floating slick. Deflection

exclusion booming is used to prevent oil from entering an area such as inlets, coves, marshlands, water intakes, and shorelines. Most spills use a combination of booming strategies depending on the size and complexity of the spill. There are also specialized booms such as sorbent booms that integrate containment and recovery of spilled oil and burn-booms that have been designed to withstand the heat of in-situ burning of oil within the boomed area.

Oil spilled on land is often contained with earthen berms, trenches, hay bales, and similar methods. To the extent feasible, containment measures should prevent spills from entering water, including through artificial structures such as storm drains.

5.2 Mechanical Recovery of Oil

On surface waters, mechanical recovery is usually accomplished by skimming, vacuums, and sorbents to recover oil from the surface of the water.

Skimmers come in a variety of designs and sizes. Skimming units can be used on spills ranging from minor incidents to major offshore disasters. Large skimming vessels are generally used on larger, open-water spills. They are vessel-mounted and are much more expensive to purchase and maintain than small individually deployed skimming units. The effectiveness of open-water skimming operations is determined by oil encounter rates (defined by the speed the vessel can effectively skim and the amount of oil that can be directed into the skimmer) and sea state.

Vacuum trucks may be used to suck up surface oil and water contained within boom. Most commonly, vacuum trucks are used to target smaller areas of oil along the shoreline or associated with spills on land.

Sorbent materials including "sorbent pads," "pom poms," sweep," and similar materials are often deployed as a basic but effective method of oil recovery; this does add to the amount of waste debris generated by a spill. Recent technology advances include development of potentially reusable sorbents where adsorbed and/or absorbed oil can be wrung out of the material allowing for reuse and less waste.

On shorelines, cleanup effort and planning may be conducted with greater attention to detail, injury assessment, selection of techniques, and cost effectiveness. Shoreline cleanup should be implemented as rapidly as possible to reduce the effects of oil migrating to adjacent clean shorelines. Oil spills on land are often recovered by hand crews and heavy equipment (e.g., shovels, vacuum trucks, excavators, and bulldozers).

5.3 Applied Response Technologies

The following few subsections discuss use of various Applied Response Technologies (ARTs). ARTs generally fall into two main categories:

- Use of an oil spill cleanup agent (such as dispersants, surface washing agents, oil gelling or solidifying agents, oil herding agents, de-emulsifiers, bioremediants, and sorbents, or;
- Use of oil burning (in-situ burning, or ISB), either on water or on land.

The National Contingency Plan (NCP) requires that all ARTs be authorized by the RRT Region IX prior to use in spill response except for dispersant usage in pre-authorization areas for which approval is at the sole-discretion of the FOSC. The OSPR Administrator has additional authorities for use of ARTs in or near California state waters.

Federal procedures for authorizing the use of chemical and biological countermeasures are contained in Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300. Unless pre-authorization for their use has been given, the FOSC must obtain approval from the US EPA representative to the RRT and the State representative to the RRT from the affected states before they can be applied. In addition, the Region IX RCP requires consultations with the Department of the Interior and Department of Commerce (NOAA) for use of dispersants. However, the FOSC may authorize the use of chemical and biological countermeasures without the concurrence of the RRT in situations hazardous to human life.

The FOSC may allow use of ARTs within zones where ART use is pre-authorized. Use of ARTs outside of pre-authorization zones will be reviewed and authorized on an incident-specific basis by the RRT. It is the policy of the RRT to respond to incident-specific requests within two hours. Use of ARTs should be considered when the environmental benefit of use outweighs the adverse effects. The Region IX RCP discusses use of the ARTs in sections 4500.

5.3.1 In-Situ Burning

In-situ burning means burning the oil in place as a means of removal. In-situ burns can occur on marine waters, fresh waters, or on land. In-situ burning removes the surface oil by driving much of it into the atmosphere in the form of combustion gases and soot. Only a public officer with statutory authority to burn oil as a method to remediate an oil spill can do so [HSC §41801(g)]. The OSPR Administrator has this authority [GC §8670.7]. An issue for the Incident Command is to compare the effects of burning versus not burning and choose the option that provides the greatest net benefit to the environment, without causing undue public health impacts. See Figure 2.

For on-water in-situ burn operations, oil must be contained in order to maintain a minimum burn thickness. As a result, the technology is limited by any adverse weather or sea state conditions that limit oil containment. In-situ burning does have the potential to accelerate cleanup of petroleum on surface waters and at the same time reduce the risk of petroleum-related impacts on environmentally sensitive areas.

For burns on federal and state waters, the Region IX RCP describes the authorization process. Currently, a request for approval to perform an in-situ burn must be made by the FOSC to the RRT and in conjunction with permitting authorities in the affected local air district (see Enclosure 4800 of the RCP).

(In-Situ Burning Decision-Tree follows)

In-Situ Burning Decision-Making Process
Decision Tree

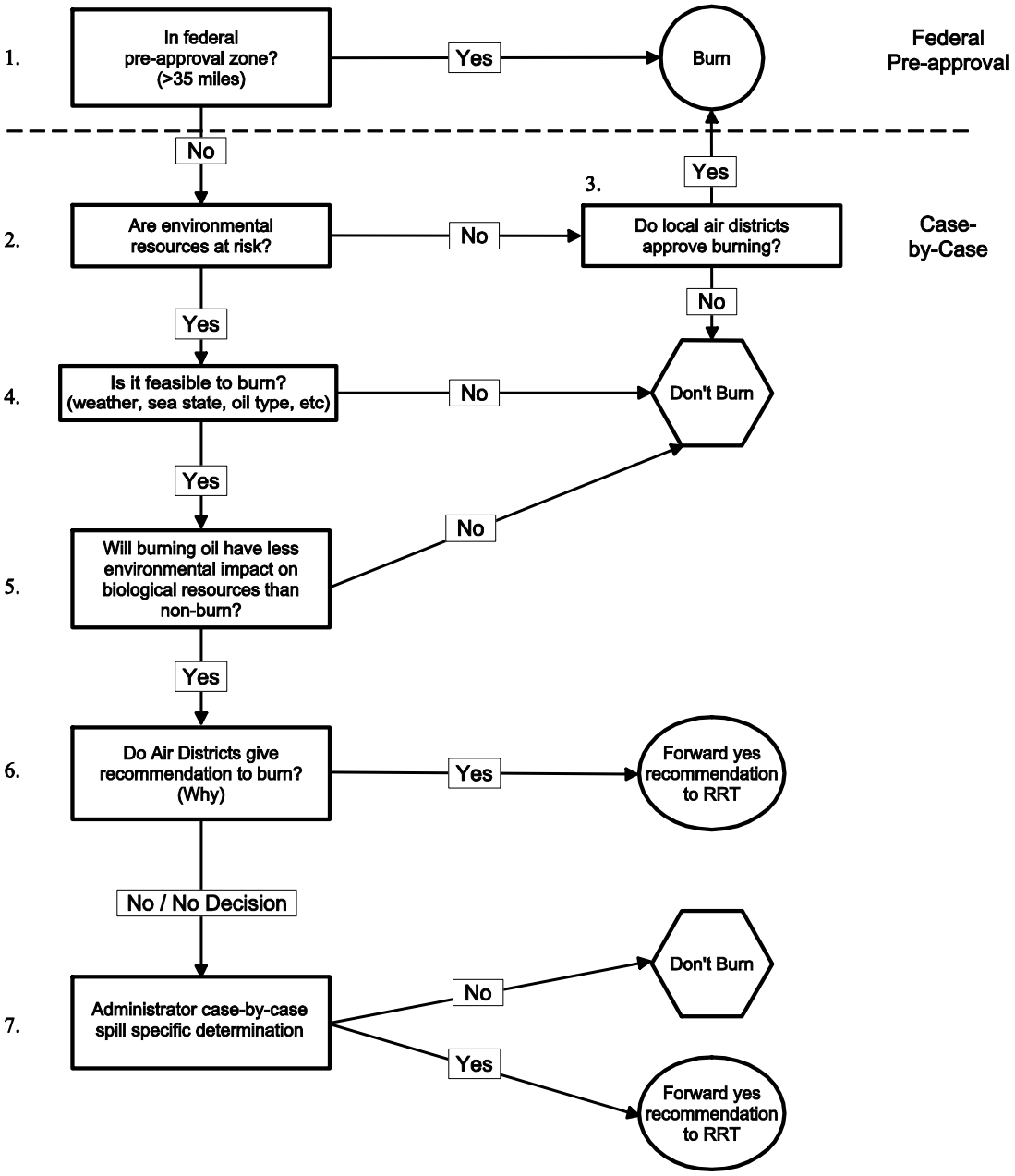

Figure 2

5.3.2 Dispersants

Dispersants are detergent-like products that are applied directly to an oil slick to assist with breaking up the slick into small droplets ranging in size from a few microns to a few millimeters. The key components in dispersants are surface active agents called surfactants. Dispersants do not cause the oil to sink but move the oil from the surface of the water into suspension in the water column. The use of dispersants in or near California waters is detailed in the RRT IX Dispersant Use Plan for California Waters (DUP), a section of the Regional Response Team IX Regional Contingency Plan. The DUP is available here: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=174368&inline .

By removing the oil from the water surface, birds, mammals, and sensitive coastline and natural resources are protected, but at the potential expense of water column resources. Once in the water column, the oil is diluted to less harmful levels, and eventually is used as a food source by bacteria. After a dispersant application, dispersed oil may pose toxicity to juvenile and sensitive-life-stage organisms within the water column, depending on concentrations, time, and mixing. The use of dispersants presents an environmental trade-off, and net environmental benefit analysis methodology is used for evaluating the appropriateness of using dispersants.

Dispersants may also require a threshold level of energy, such as a breaking wave, to allow for the product to properly mix with the oil and partition into the water column. Dispersants can be effective in areas where environmental or logistical considerations will not allow the deployment of cleanup equipment and personnel. Dispersants are generally most effective if used within 24 hours after the spill occurs, but many factors can extend or reduce the "window of opportunity" for the use of dispersants.

In California, dispersants must be licensed by the Administrator before they can be considered for use in state waters. Presently, four dispersants (two each from two manufacturers) have been licensed by OSPR for use consistent with the DUP. There are no dispersants currently formulated or licensed for use in freshwater. California regulation prohibits the use of dispersants on or near shorelines and on freshwater rivers and streams.

The FOSC will evaluate the need to use dispersants during a marine offshore oil spill. Currently, all dispersant use in Region IX is governed by either the pre-authorization process or an incident-specific authorization process. For marine waters, there is a pre-authorization zone from 3 miles to 200 miles offshore and outside of Marine Sanctuary Boundaries and not within 3 miles of the California/Mexico border. There is a narrow band of water from 3-5 miles off the coasts of Del Norte, Humboldt and Mendocino counties that is considered part of the pre-authorization zone during the marbled murrelet non-breeding season but requires incident-specific authorization for dispersant use during their breeding season. The use of dispersants in all other state waters is decided by US EPA in consultation with the state and natural resource trustees on an incident-specific basis using the decision tree shown below (Figure 4) (see Region IX RCP, Enclosure 4600; and RRT IX Dispersant Use Plan for California.

The dispersant use decision flowchart, and associated decision-support checklist and all job aids were revised in 2018.

The Administrator is required to provide written justification of use of dispersants to the Legislature within 3 days of any use in State waters, and provide, within 2 months, a report on the effectiveness of the dispersants used [GC §8670.13.3].

(Dispersant Use Decision Flowchart and Checklist follow)

RRT IX Dispersant Use Decision Flowchart for California

Presumed: Oil has been spilled, dispersant use is being evaluated for its appropriateness to the incident, and the DISPERSANT DECISION SUPPORT CHECKLIST is being completed.

Policy: It is RRT IX policy that the NOAA SSC and/or the CDFW-OSPR ART Technical Specialist lead the dispersant evaluation process whenever possible.

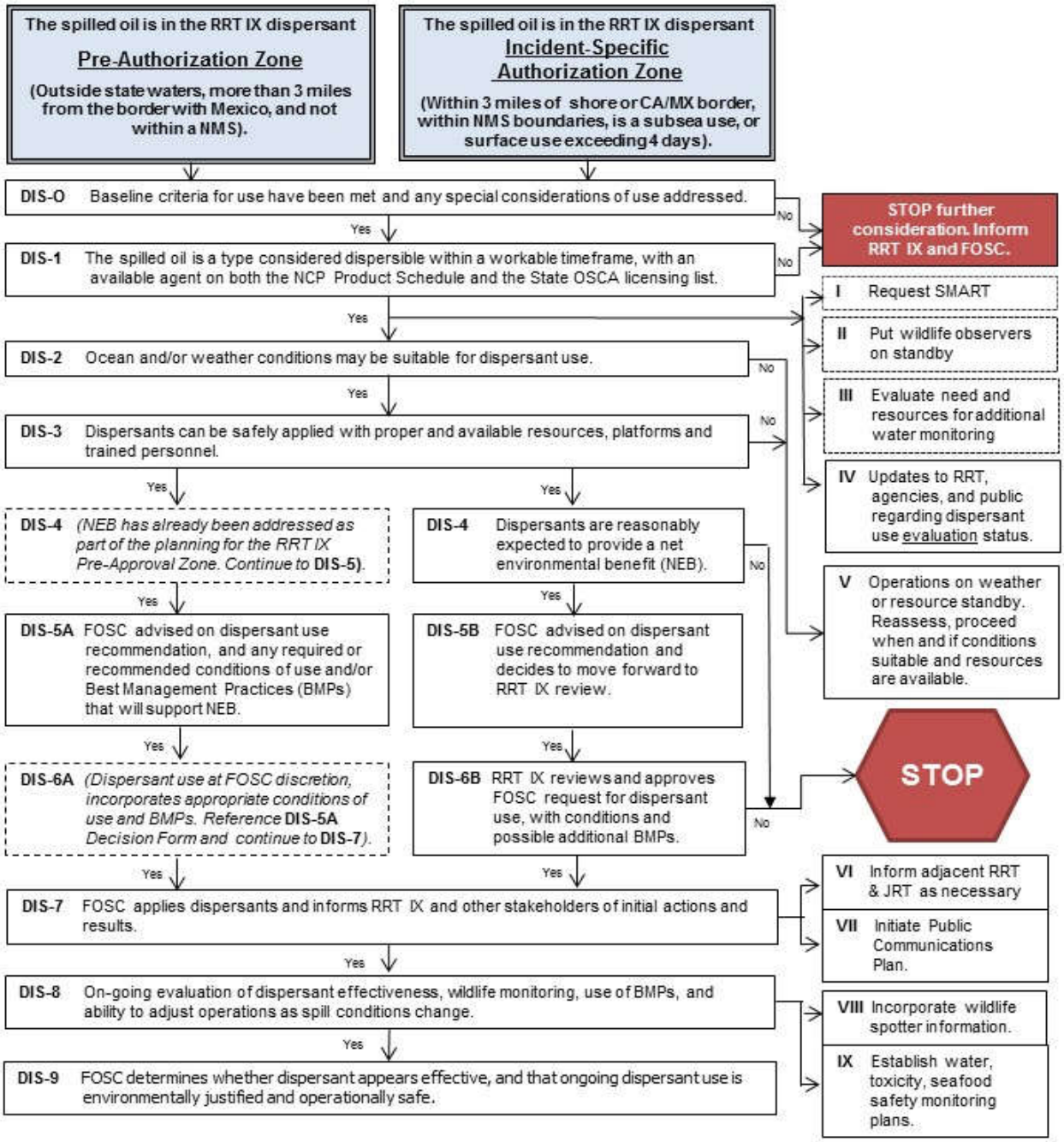

Figure 3

5.3.3 Oil Spill Cleanup Agents

An oil spill cleanup agent (OSCA) is defined as any chemical, or any other substance, used for removing, dispersing, or otherwise cleaning up oil or any residual products of petroleum in, or on, any of the waters of the state [GC §8670.3]. In addition to dispersants and bioremediants, these products include sorbents, surface washing agents, beach/shoreline cleaners, herding agents, gelling agents and solidifiers, and emulsion treating agents.

These products generally have specific use parameters targeting specific spill situations such as heavy oil in sensitive tidal marsh environments, or thin oil layers that may be herded into thicker slicks for recovery or burning. The approval and use of these products within state waters is under the jurisdiction of the Administrator and the RRT IX.

5.3.4 Biological Countermeasures

Use of biological countermeasures, or bioremediation, is another subset of oil spill cleanup agents. It involves the enhancement of indigenous hydrocarbon-degrading bacteria, introduction of specialized oil-eating bacteria, or the addition of nutrients or oxygen to support microbial populations. Microbes or microbial processes are used to break down oil more quickly than would occur without their introduction into the area of a spill.

Effective bioremediation requires that the bacteria, water, oxygen, and bio-available oil all be present in the same location at the same time. Adequate nutrients to sustain the bacteria are also required. As a result, the rate of biodegradation is slow (weeks, months, years) for shoreline cleanup. Less is known about the rate of bioremediation in open water environments. At present, bioremediation should be viewed as a finishing agent for the final stages of cleanup where further mechanical removal would do more environmental harm than allowing the residual oil to remain in the environment and biodegrade.

Note, OSPR is only involved with the use of bioremediants when addressing oil spills to water, or to lands where run-off can affect state waters. Bioremediation is a commonly used strategy for in-situ and ex-situ soil remediation projects in California and elsewhere.

Specific policies and procedures for the use of bioremediation during spill response can be found in the Region IX RCP, Enclosure 4700.

SECTION 6 – Airspace Restrictions

6.0 General Summary

If necessary, the UC could seek secured air space over an incident. For a large incident, this request would come through the Air Operations Branch Director in the ICS. The request can be made to the local Flight Standards District Office (FSDO) of the Federal Aviation Administration (FAA).

A request could also be made to the National Response Center through the RRT, and the National Response Center would then forward the request to the FAA. The FAA would decide to issue a Notice to Airmen (NOTAM) restricting certain air space in the area of the oil spill.

See also, Region IX RCP section on Air Operations.

SECTION 7 – Communications

7.0 Communication Frequencies

For small incidents, standard radio frequencies may be used. For larger incidents, the UC will establish a formal Communications Plan. Communications on-scene by VHF-FM radio will likely be conducted on frequencies designated by the USCG, US EPA, Cal OES, or via the California Law Enforcement Mutual Aid Radio System (CLEMARS) with a National Law Enforcement Mutual Aid Radio System (NALEMARS) channel. Cal OES operates three interconnected Mobile Relay radio networks for Mutual Aid coordination and oversees a number of communications channels for field level coordination purposes. Collectively, these are known as the Statewide Mutual Aid Radio System (SMARS).

CLEMARS Radio Frequencies

Channel	Frequency MHz
1	154.920
2	154.935
NALEMARS Channel 3	155.475
UHF	460.025
Low Band	39.460
800 MHz	866.200 868.5125

NOAA Weather Radio Frequencies

Channel	Frequency MHz
WX1	162.55
WX2	162.4
WX3	162.475
WX4	162.425
WX5	162.45
WX6	162.5
WX7	162.525

Some relevant United States VHF maritime telecommunication channels are:

USCG Radio Frequencies

Channel	Transmit MHz	Receive MHz	Use
9	156.45	156.45	Boater Calling. Commercial and Non-Commercial.
11	156.55	156.55	Commercial. VTS in selected areas.
12	156.6	156.6	Port Operations. VTS in selected areas.
13	156.65	156.65	Intership Navigation Safety (Bridge-to-bridge); for ships >20m length while in US waters.
14	156.7	156.7	Port Operations. VTS in selected areas.
16	156.8	156.8	International Distress, Safety and Calling.
22A	157.1	157.1	USCG Liaison and Maritime Safety Information. Broadcasts announced on channel 16.
24	157.2	161.8	Public Correspondence (Marine Operator)
25	157.25	161.85	Public Correspondence (Marine Operator)
26	157.3	161.9	Public Correspondence (Marine Operator)
27	157.35	161.95	Public Correspondence (Marine Operator)
28	157.4	162	Public Correspondence (Marine Operator)
73	156.675	156.675	Port Operations

See: http://www.navcen.uscg.gov/?pageName=mtVhf
https://www.caloes.ca.gov/office-of-the-director/operations/logistics-management/public-safety-communications/radio-communications-branch/
http://www.nws.noaa.gov/nwr/
https://scancal.org/oes/index.html

The use of cellphones and tablets (for calls, texts, emails, and apps) and satellite communication devices (like Garmin inReach and SPOT) are widely utilized in oil spill response. Limited reception in remote areas can be a challenge, but solutions like Cellular On Wheels (COW) devices and hotspots exist to mitigate some of this.

7.1 Shipping Lanes and Navigational Aids, and Ship Position Reporting and Communications

Information regarding shipping lanes and navigational aids for tankers, barges, and other commercial vessels and ship position reporting and communications can be found in Chapter 2 of Volume 7 of the Coast Pilot, regarding *Navigation Regulations* (see https://nauticalcharts.noaa.gov/publications/coast-pilot/index.html).

The *United States Coast Pilot*, published by NOAA, is a series of nine nautical books (volumes) that cover a wide variety of information important to navigators of US coastal and intracoastal waters and the waters of the Great Lakes. Most of the Coast Pilot information cannot be shown graphically on the standard nautical charts and is not readily available elsewhere. The topics in the Coast Pilot include, but are not limited to, channel descriptions, anchorages, bridge and cable clearances, currents, tide and water levels, prominent features, pilotage, towage, weather, ice conditions, wharf descriptions, dangers, routes, traffic separation schemes, small-craft facilities, and Federal regulations applicable to navigation.

7.2 Public Information Officer and Joint Information Center

During an oil spill response in California, public information activities will be carried out by representatives of the UC (USCG, US EPA, OSPR, the RP, and in some cases a local jurisdiction representative) in coordination with federal, tribal, state, and local organizations. Depending upon the size of the incident, the lead Public Information Officer (PIO) and the Joint Information Center (JIC) manager may serve on-site or conduct activities from the office or another remote location in a virtual JIC, as directed by the UC. The PIO team will coordinate via phone, e-mail, in person, or other method to provide early notification to the public/media. The team will also draft and coordinate review of internal talking points, draft news releases, frequently asked questions, fact sheets and other materials under the direction of the unified command. PIOs will collaborate with the Liaison Officer to ensure stakeholder updates are consistent with press and other public communications.

Additional communication products that may be considered by the PIO and JIC include, but are not limited to, social media communications, press conferences, public meetings and website updates.

The complete PIO and JIC operational recommendations are located at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=57817.

7.3 Liaison Officer

Stakeholder engagement will be carried out by representatives of the UC, specifically the Liaison Officer (LOFR). The lead LOFR will be typically assigned from a government agency. Depending upon the size of the incident, the LOFR may serve on-site or conduct activities from a remote location, such as OSPR's Operational Center in Sacramento, as directed by the UC. The LOFR will coordinate via phone, e-mail, in person, or other method to provide early notification and updates to affected and potentially affected federal, state, and local agencies and other identified stakeholders. The LOFR will develop and implement a stakeholder engagement plan, which identifies the stakeholders, the method and frequency of engagement, and other relevant information. The LOFR will ensure stakeholder updates are consistent with press and other public communications. The LOFR also coordinates with the JIC and Command regarding hosting open houses for the public, stakeholders, and the media, when applicable. Local agencies may choose to be represented by their own Agency Representatives (AREPs) within the ICP and will work directly with the LOFR.

SECTION 8 – Quantification and Disposal

8.0 General Summary

Early during a spill, a rough estimate of the total volume of the spill is needed in order to approximate what percent of the spilled oil is being recovered and removed from the environment. This estimate is also used to determine equipment and personnel needs for disposal issues. Early reported estimates of spill size are often unavailable or inaccurate and are best determined on-site. A rough estimate of spill volume can be attempted by considering the source container (e.g., tank, ship, etc.) size, and the slick size and thickness.

As oil and oily debris is collected, it will need to be segregated and securely stored prior to final disposal. Therefore, recovery operations need to be simultaneously coordinated with disposal operations. Issues such as interim storage, long-term storage, transportation, and ultimate disposal or re-use must be addressed. Typically, responders performing Planning and Operations duties will develop a waste disposal plan; for large spills, a Disposal Group Supervisor will be designated and a formal Disposal Group will be established in the Operations Section. Oily debris typically includes not only oiled vegetation, dirt, and other refuse, but also oiled sorbents, protective clothing, and decontamination wash. Prior to disposal, these materials need to be segregated according to type and the amount of oil in the debris quantified based on volume and degree of oiling. Oily materials will have to be characterized as hazardous or non-hazardous waste and handled accordingly. Some of these materials may be evidence for civil or criminal enforcement actions and must be handled and stored according to evidence protocols. All wildlife carcasses encountered with oily debris are separated out at the time of collection. Carcasses are immediately bagged, tagged, collected, and then provided to and retained under the direction of the Wildlife Branch and the Law Enforcement Division as evidentiary material to determine the injury and damage caused by the spill.

When oil is recovered from surface waters, much of the recovered material is water; thus, storage containers fill-up with more water than oil. To help make storage space available for oil, sometimes the recovered water may be decanted back into the surface water where it was collected. In Federal waters decanting can be approved through a request to the FOSC. For California state waters, there is a Memorandum of Understanding (MOU) between OSPR and the State Water Resources Control Board (SWRCB) regarding decanting oil into marine waters. The MOU pre-approves decanting if certain conditions are met [GC §8670.7; section 3900 of the RCP]. For inland state waters, approval for decanting must be obtained from the RWQCB during the incident.

Decontamination of people and equipment is a large disposal issue, as the process may result in additional waste streams. Under the Recovery and Protection Branch, the Decontamination Group Supervisor is responsible for decontamination of personnel and response equipment. In 1997, the Administrator and DTSC entered into a MOU regarding limited pre-approval for handling oily materials recovered from a spill into state waters. The

MOU provides that recovery, containment, and transport of oily materials to temporary storage sites do not need manifesting or facility permits. However, transport away from temporary storage sites may need permits. The material must be characterized; if the material is deemed hazardous waste, then additional requirements will apply. Recovery, handling, and disposal actions need to be compliant with State and Federal laws. The Area Contingency Plans (ACPs) and the Region IX RCP have disposal sections further describing the specifics of waste characterization and handling (see ACP §3000; RCP Section 3900).

SECTION 9 – Natural, Cultural, and Historic Resource Protection

9.0 General Summary

The following subsections describe the preparedness measures and response actions for natural, cultural, and historic resource protection, including fish and wildlife. Some subsections are more relevant to marine oil spills. These are required to be part of this Plan pursuant to GC §8574.7.

9.1 Natural Resource Protection and the Environmental Unit (EU)

After protecting human health and safety, reducing impacts to natural, historic, and cultural resources are the highest priorities during oil spill response. The Environmental Unit (EU) is the central point within the Planning Section of an Incident/Unified Command for determining how to best protect those resources while facilitating efficient and effective spill cleanup to proceed. Specifically, the EU is responsible for environmental matters associated with the response, such as strategic assessment, modeling, surveillance, and environmental monitoring and permitting (see IMHs, Ch. 8, Planning).

To ensure that critical response decisions are arrived at quickly and effectively in the EU, it is essential that the EU Leader (EUL) possess both local knowledge and the authority to make decisions on behalf of these resources and the people of the state. Trustee agencies are best equipped to provide the needed knowledge base and expertise to fill this role, and have personnel most familiar with local natural resources and resource issues. In addition, trustee agencies possess the authority to manage these natural resources and have statutory responsibilities to protect them. For these reasons, it is the policy of the State that the EUL position be filled with a representative from a State or Federal natural resource trustee agency and may be assisted by a deputy EUL or coordinator assigned by the RP. As a spill response matures, transition to an RP representative as the EUL may occur with concurrence of the UC. If no such agency representative is initially available, an RP representative may temporarily fill the role until a trustee agency representative is available.

Regarding spills to surface waters, another critical function of the EU is implementation of the Shoreline Cleanup Assessment Technique (SCAT). Within the EU, a SCAT Team collects the data needed to develop a shoreline cleanup plan that maximizes the recovery of oiled habitats and resources, while minimizing the risk of injury from cleanup efforts. The plan also identifies the cleanup endpoints for the Operations Section. The shoreline cleanup plan will also be reviewed by cultural/historic specialists to ensure that the proposed actions are implemented in a manner which minimizes risks to cultural and historic resources. Information from these assessments must meet the requirements of the cleanup operation, being both timely and of uniform quality and content. A SCAT Team must coordinate their field activities with cleanup operations in the areas being assessed. This coordination ensures that all operations are conducted safely and that important information is exchanged.

The SCAT Coordinator manages the teams and synthesizes their field data into reports used by the EU and Planning Section to support the daily Incident Action Plan (IAP). It is essential that the SCAT Coordinator position be knowledgeable of SCAT duties and spill cleanup methods as well as local shorelines and associated resources. Therefore, it is the policy of the State that the SCAT Coordinator position is filled by qualified staff, such as OSPR EU staff, and may be assisted by a deputy Coordinator provided by the RP. As a spill response matures, a transition to a RP representative to fill the role of SCAT Coordinator may occur with the concurrence of the Unified Command. If no qualified State or Federal staff is initially available to fill the SCAT Coordinator position, a RP representative may temporarily fill that role. The information and recommendations generated by the EU and SCAT are used by the Planning Section and by the Operations Section.

9.2 Cultural and Historic Resource Protection

Initial assessment of the potential for a spill or the spill response to impact cultural and/or historic resources can be determined through initial presence/absence requests by EU staff to the appropriate California Historical Resources Information System (CHRIS) Information Center and the Native American Heritage Commission (NAHC). If such resources are expected to be present, a Tribal Liaison may be established within the UC, and a Cultural/Historic Resources Technical Specialist (THSP) may be established within the EU. The NAHC will be asked to provide a list of known tribes (including those that are not federally recognized) in the area that may be affected, as well as to evaluate cultural resources sensitivity. The NAHC and tribal representatives will determine if a Native American representative and/or monitoring is required on scene during the response. Due to the sensitive and confidential nature of cultural and historic site information, the Cultural/Historic Resources THSP or Historic Properties Specialist (HPS) described below may contact the appropriate CHRIS Information Center to determine potential resources at risk. If resources at risk are likely to be present, the Cultural/Historic THSP or HPS will ultimately contact the Office of Historic Preservation within the California Department of Parks and Recreation to document potential impacts to these resources. Any human remains, burial sites, or burial-related materials that are discovered during a spill response must be treated in a culturally appropriate and professionally proper manner at all times. Procedures detailed within State (HSC § 7050.5) and Federal (Native American Graves Protection and Repatriation Act) law shall be followed. Cultural and historic resources should be protected using the National Historic Properties Implementation Guidelines in the Region IX RCP. The FOSC can also obtain a Historic Properties Specialist, pursuant to the National Historic Preservation Act (Section 106), to ensure the FOSC meets his or her Section 106 legal obligations.

The Tribal Liaison will serve as liaison between the UC and tribal government representatives and consult with affected tribes in the spirit of AB 52 (Gatto, Chapter 532, Statutes of 2014). This government-to-government coordination shall be extended to all federally recognized tribes, as well as to non-federally recognized tribes listed by the Native American Heritage

Commission. Additionally, OSPR follows procedures set forth in an Incident Tribal Liaison Guidance Document.

9.3 Wildlife Response

California has a Wildlife Response Plan, which details the purposes, goals, objectives, responsibilities, and structure of the Wildlife Branch. The Plan describes procedures to be used, along with personnel and equipment needed, to meet wildlife protection responsibilities of federal and state governments during a spill. The current plan can be found at: http://www.wildlife.ca.gov/OSPR/Preparedness/Wildlife-Response.

The Wildlife Branch is within the Operations Section of the UC and provides for coordinated, immediate, and effective protection, rescue, and rehabilitation of, and minimization of risk of injury to, wildlife resources and habitat during oil spills. The principal objectives during a spill response are to:

- Prevent and/or minimize injuries to wildlife and habitat from the spill and/or the spill response activities
- Provide best achievable capture and care for oiled/injured wildlife
- Document adverse effects to wildlife that result from the spill and cleanup

These objectives are achieved through reconnaissance, hazing/deterrence, and recovery, transportation, care, and processing of oiled wildlife.

Although the Wildlife Branch is integrated into the UC, it is self-directed in many ways and largely self-contained with regard to wildlife response resources (both staff and equipment). The Wildlife Branch gathers much of its own spill information through wildlife reconnaissance, is staffed with pre-trained experts (e.g., biologists, veterinarians, rehabilitation staff, processing staff, capture experts, volunteers), and typically prepares its own sections of the Incident Action Plan for the Planning Section including specialized safety considerations.

Coordination between the Wildlife Branch and other Sections within the UC is critical. The Wildlife Branch provides the Planning Section with potential and known wildlife concerns, wildlife reconnaissance data, and wildlife recovery locations. The Planning Section and Operations Section use this information to aid in strategic assessment and for planning and implementation of response strategies. The Planning Section should use this information to evaluate different response countermeasures and strategies (including "no action") in order to reduce or prevent adverse effects to wildlife and wildlife habitat from response actions. In parallel, the EU provides the Wildlife Branch information on Resources at Risk and other known wildlife occurrences as well as maps of sensitive habitats and other areas of interest (e.g., known haul-outs, nesting areas, etc.).

Through the Situation Unit and the EU in the Planning Section, the Wildlife Branch also provides the UC with updated wildlife statistics during the response. With approval of the Unified Command, this information is also relayed to the Joint Information Center to be used in press releases. The Wildlife Branch needs information from the other Sections as well.

The Wildlife Response Plan provides statewide consistency for the responsibilities and capabilities of the Wildlife Branch. In California, trained OSPR staff assume the role of Wildlife Branch Director during a spill response. This is a natural consequence because the CDFW:

- Is the lead state trustee agency for California's wildlife and habitat
- Has permits and agreements with other state and federal trustee agencies to care for special status species and other protected wildlife
- Has legal mandates to protect wildlife, in addition to trustee designation pursuant to OPA 90 (see Sec. 9.0 infra)
- Has the relevant expertise, training, and experience

Other than the Wildlife Branch Director and Wildlife Reconnaissance Group Supervisor and staff, most positions in the Wildlife Branch are filled by staff and volunteers of the Oiled Wildlife Care Network (OWCN), described in Section 9.4 below.

While the Wildlife Response Plan was originally designed to cover petroleum oil spills in marine waters, today it is applicable to inland oil and renewable fuel spills as well. The organizational structure, roles and responsibilities remain the same, although some functions may be altered, as appropriate.

9.4 Rehabilitation Facilities for Wildlife Injured by an Oil Spill

The Administrator is required to establish a network of rescue and rehabilitation stations for wildlife affected by oil spills [GC §8670.37.5; §8670.48(l)]. This network is the Oiled Wildlife Care Network (OWCN) and it is a cooperative system of specialized wildlife health centers and organizations. The OWCN is administered by the Wildlife Health Center at UC Davis. The Wildlife Health Center has a Memorandum of Understanding with OSPR for operation of the OWCN to establish and equip wildlife rescue and rehabilitation stations, provide training to members, and services to rescue and rehabilitate oiled wildlife. The OWCN is integral to Wildlife Branch activities in the Operation Section during an oil spill, both marine and inland (see Section 4.7).

The OWCN maintains a corps of veterinarians, paid staff, and professionally trained volunteers. The OWCN is comprised of over 45 rehabilitation organizations and other wildlife experts throughout California to actively participate during oil spill responses and includes eight permanent wildlife care facilities. If a particular wildlife care facility becomes overwhelmed, then additional facilities are utilized. For more information on the OWCN, see https://owcn.vetmed.ucdavis.edu/.

9.5 State or Local Agency Permits

Some agencies indicate that they require issuance of a relevant permit mandated by that agency during the spill response operations. However, these permits might be "expedited" or the permit may be required after the emergency response actions have taken place (i.e., retroactive permit based on an initial emergency notification). Other agencies have emergency exemptions or may take the position that a particular permit is not needed in emergency situations. Regarding collection and handling of wildlife during a spill, only the CDFW, federal wildlife trustee agencies, or entities with permits or other authorization will be allowed to collect or handle wildlife.

9.6 Temporary Closure of Commercial and Sport Fishing and Harvesting

CDFW is responsible for closing and re-opening sport and commercial fisheries as necessary to protect public health following oil spills, based on coordinated health assessments and recommendations by the Office of Environmental Health Hazard Assessment (OEHHA) [FGC §5654, 7715]. OEHHA assesses the risks from consuming fish in the oil spill area; this assessment is used to determine whether closure of commercial and recreational fishing is necessary, the geographical boundaries of the closure, and the likely time period of the closure. In the event of a closure lasting more than 48 hours, OEHHA and OSPR coordinate sampling and analysis of fish and shellfish in the area impacted by the spill to determine when fish and shellfish are safe to consume. Only when safety thresholds are met can CDFW lift a temporary closure.

Additionally, DPH is required to close shellfish growing areas if DPH determines chemical substances have affected shellfish [HSC §112150-112280; FGC §7715].

SECTION 10 – Environmentally and Otherwise Sensitive Sites

10.0 General Summary

The following subsections are generally relevant to both marine and inland oil spills, describe planning and informational tools that support the identification and protection of environmentally sensitive areas (ESAs), and are required to be part of this Plan pursuant to GC §8574.7. ESAs are identified in the following sources: Area Contingency Plans, Geographic Response Plans, industry oil spill contingency plans, California Natural Diversity Database, Biogeographic Information and Observation System, NOAA's and OSPR's Environmental Sensitivity Index (ESI) maps, and NOAA's Environmental Response Management Application (ERMA). Some of these sources also identify strategies for prioritizing and ensuring the protection of ESAs.

10.1 Area Contingency Plans

The laws enacted following the catastrophic oil spills of 1989 (*Exxon Valdez*) and 1990 (*American Trader*) required oil spill contingency planning for both State and Federal Governments. The USCG and OSPR agreed to joint preparation of California contingency plans and co-chairing of the three USCG Port Area Committees (Area Committees) for areas San Francisco, Los Angeles/Long Beach, and San Diego.

In a State with rich environmental resources, the Area Committee planning process is a proactive effort to deal with potential oil releases inherent in California's petroleum-dependent economy and culture. This planning process is open to all stakeholders and has involved representatives from over 50 stakeholder groups, including environmental groups, city and county agencies, special districts, California state agencies, the Federal government, and industry. These organizations have come together to produce a comprehensive planning document that serves as a "one stop" marine pollution response plan for the three port areas, which included six geographical sections of the California coast. The three Port ACPs provide guidance for the first 24 hours of response, and each of the six coastal subdivisions have provided detailed evaluation and recommendations for protection of the State's shoreline resources (see https://www.wildlife.ca.gov/OSPR/Contingency).

10.2 Geographic Response Plans

Geographic Response Plans (GRPs) follow a similar approach and layout as an Area Contingency Plan, but cover inland waters, and target a much smaller area; typically a river or portion of a river or other water body.

Prioritization for developing GRPs is given to waterways within ¼ mile of pipelines, facilities, or high-risk rail; areas with higher risk to sensitive fish and wildlife and the habitats that they

depend on; and areas with cultural and historic concerns. The response strategies described in GRPs are typically driven by access to sites along rivers and lakes where response activities are feasible. Unlike marine response where on-water access and active oil recovery can occur, the majority of the response activities for an inland spill occur on and from the shoreline. Often, large stretches of river shoreline are not readily accessible. The process of developing GRPs for the State consists of 1) developing and utilizing a template to provide a consistent document framework, 2) convening and meeting with a Statewide GRP Steering Committee, 3) developing partnerships with industry representatives and federal, state and local agencies, including first responders, and 4) vetting the GRPs through statewide Local Emergency Planning Committees (LEPCs) to ensure critical local expertise and information is incorporated. Completed GRPs are available online (see https://www.wildlife.ca.gov/OSPR/Contingency).

10.3 Industry Oil Spill Contingency Plans

For vessels and marine facilities that need an oil spill contingency plan, the plan can reference the relevant ACP's sensitive site identification and protection strategies. Inland facilities, pipelines, refineries, and railroads within ¼ mile of inland waters must also develop oil spill contingency plans. Facilities must conduct an Offsite Consequence Analysis that, for the most likely hazards, assumes pessimistic water and air dispersion and other adverse environmental conditions [GC §8670.28(a)(7)(9), §8670.29(b)(5)]. These plans then identify the strategies for protecting the sensitive areas and resources that would be threatened by this Reasonable Worst Case Spill scenario. Vessels and marine facilities utilize the ACPs to meet this requirement. However, until GRPs are developed and can be similarly utilized, inland facilities will need to perform an Offsite Consequence Analysis, list and map of resources at risk, and protection strategies for those resources. In the inland environment, the primary protection strategies will be on-land containment and use of physical barriers (e.g., earthen berms and blocking culverts) and diversion booming to move oil away from sensitive riverine and riparian resources.

10.4 Sensitive Site Identification and Protection Strategies

Protection of environmental resources is given the highest priority after human health and safety during oil spill response. Both Federal and State laws require that sites having special environmental sensitivity be identified and provisions be made to protect or otherwise mitigate for the site impacts from spills. In California these locations are termed sensitive environmental sites. Examples of sensitive sites include wetlands; estuaries; lagoons with emergent vegetation (e.g., marsh, riparian); habitats of species that are listed or candidates for listing as rare, threatened, or endangered; sites with significant concentrations of vulnerable and/or sensitive species; species experiencing significant population declines though not yet threatened; and culturally sensitive areas.

For ACPs, the selection of sensitive sites and development of specific protection strategies to meet the site specific needs in marine waters are conducted using a standardized protocol

to ensure consistency for California's entire coast. Each site has an environmental sensitivity ranking (A – Extremely Sensitive; B – Very Sensitive; or C – Sensitive) that help to define the environmental sensitivity of the area and its resources at risk. In addition, economic sensitive sites (e.g., industrial water intakes, marinas, etc.) may be identified and ranked (D – High Water Quality Economic Sites, E – Direct Water Use Economic Sites, F – Indirect Water Use Economic Sites) through the Area Committee process. Descriptions and locations of designated sensitive sites are maintained in the ACPs (see ACP Volume II Section 9800).

ACPs do not specifically call out economic sites beyond as described above. However, economic importance is one criterion to be used in the identification and prioritization of sensitive areas (e.g., a known commercial fishing area) [GC 8574.7(d)(1)]. ACPs must describe areas of special economic or environmental importance that might be injured by a discharge [33 USC 1321(j)(4)(C)(ii); 40 CFR 300.210(c)(3)(i); 40 Part 300, Appx. E, 4.1.3]. GRPs similarly identity areas of special economic or environmental importance.

The process of site visits, training exercises, and discussions is used by trustees and response experts to exchange concerns and feasibility limitations in developing and subsequently optimizing protection strategies for sensitive sites. Using this approach, the local Area Committee incorporates input of State and Federal trustees, other governmental agencies, and private entities (e.g., industry, spill response contractors, non-governmental environmental groups) to form consensus on the appropriate site protection strategies and response resources. The Committee devises strategies based on new knowledge, such as testing of existing strategies, and adapts to changing conditions. GRPs, through LEPCs and the Statewide GRP Steering Committee, follows a similar process.

10.5 Response Prioritization

Generally there are three protection priorities during spill response. They are: protection of human health and safety; protection of environmental resources; and protection of economic resources. Sites predetermined to be critical to the preservation of human health, including drinking water intakes and intakes for power and desalinization plants, while not identified in the ACPs for security reasons, should be considered a high priority for protection.

The UC, through the EU, will make the final decision regarding the protection priorities for environmental sensitive sites based on three considerations: those sites at risk (how soon will the oil arrive at each sensitive site?); the predefined hierarchy of protection priorities for sensitive sites; and the time and response resources available to implement protection. The UC can use the predetermined response strategies for environmentally sensitive sites, but the UC needs to be flexible and capable of responding to changes in environmental conditions and other factors that may have a significant impact on the proposed strategies.

10.6 Sensitive Site Strategy Evaluation Program

The Sensitive Site Strategy Evaluation Program (SSSEP) for marine waters is a program by which OSPR tests and evaluates the readiness and effectiveness of oil spill response strategies that protect designated environmentally sensitive shoreline resources within the bays, estuaries, and coastal areas of the State. Under the ACPs, the defensive actions are employed to prevent, minimize, or mitigate threats to public health, welfare, and the environment. The protective response strategies that are the subject of SSSEP provide such defensive actions.

SSSEP consists of site-specific exercises designed to test the protection strategies in marine waters and to ensure the OSROs are familiar with the locations of the sites and the response strategies. Each site-specific exercise involves OSRO deployment and retrieval of mechanical shoreline protective and recovery equipment, and implementation of measures to protect sensitive resources at the site. OSPR and the OSRO will evaluate the effectiveness of each site-specific response strategy after the exercise and develop proposals for any changes to the existing plan as necessary.

In the inland environment, GRPs will focus on deploying booming strategies used to contain oil and move oil toward a collection point. Response locations are based on accessibility to the waterway. Because of access limitations, specific shoreline protection strategies have not been developed at this time.

10.7 Shoreline Protection Tables

The Shoreline Protection Tables (SPTs) set forth planning requirements for sensitive site protection from spills from tank vessels and nontank vessels transiting in California's marine waters. The owner or operator of a tank vessel or nontank vessel must demonstrate through contracts or other approved means the response resources necessary to protect all applicable sensitive sites as outlined in the appropriate SPTs [14 CCR §815.05(b) and §825.05(a)]. For the purpose of meeting these requirements, contracts for sensitive site protection services can only be made with OSROs rated by OSPR.

The requirements set forth in the SPTs are planning standards and may not reflect the exigencies of actual spill response. However, these are the standards that must be used to determine the amount of equipment and personnel that must be available under contract or other approved means. The owner/operator is ultimately responsible for protecting the sensitive sites identified from the entire volume of an actual spill regardless of the planning volume.

To the greatest extent possible, California has endeavored to be consistent with the scope and intent of the Federal oil spill response regulations and the ACPs completed by the USCG, state agencies, and local governments, with public participation, as required by the Oil

The SPTs can be found at:
http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=21978&inline=true

10.8 Data Management, Analysis, and Display

Geographic Information System (GIS) support is a critical tool for oil spill response owing to the inherent data management, analysis, and display capabilities needed by various functions in a response. OSPR first responders have GIS-based tools at their disposal to help determine and map access routes, habitat types, topography, current weather, and sensitive resources such as listed species, protected habitat, and local shorelines.

The California Natural Diversity Database (CNDDB) is a user-populated database of known locations of rare plants animals in California. The content is thorough, but is biased to areas where projects require surveys for permitting or where research is occurring. Some locational information is suppressed due to confidentiality concerns. CNDDB staff work with partners to maintain current lists of rare species, as well as maintain an ever-growing database of GIS-mapped locations for these species. CNDDB is a "natural heritage program" and is part of a nationwide network of similar programs overseen by NatureServe (formerly part of The Nature Conservancy). All natural heritage programs provide location and natural history information on special status plants, animals, and natural communities to the public, other agencies, and conservation organizations. The data help drive conservation decisions, aid in the environmental review of projects and land use changes, and provide baseline data helpful in recovering endangered species and for research projects.

CDFW's Biogeographic Information and Observation System (BIOS) is a system designed to enable the management, visualization, and analysis of biogeographic data collected by CDFW and its Partner Organizations. BIOS integrates GIS, relational database management, and Esri's ArcGIS Server technology to create a statewide, integrated information management tool that can be used on any computer with access to the Internet.

Other useful tools include user-populated databases such as eBird (https://ebird.org/home), iNaturalist (https://www.inaturalist.org/), and mapping tools such as GoogleEarth.

NOAA's Environmental Sensitivity Index (ESI) maps 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).

NOAA's Environmental Response Management Application (ERMA) is an online GIS mapping tool and data viewer that integrates both static and real-time data, such as ESI maps (see https://response.restoration.noaa.gov/resources/environmental-sensitivity-index-esi-maps), ship locations, weather, and ocean currents, in a centralized, easy-to-use format for environmental responders and decision makers. ERMA is designed to aid in spill preparedness and planning.

During emergency response, ERMA is an excellent platform to be used for the Common Operating Picture (COP) that provides situational awareness across the response community. Additionally, ERMA can be used by planners before a spill happens to identify vulnerable locations, establish protection priorities, and identify cleanup strategies.

A Data Management and Sharing Plan is an important document meant to ensure continuity of information across the various entities represented within the UC and facilitate sharing amongst the response personnel during the incident. Furthermore, this plan will set the foundation for archive and access to data used for these purposes. The scope of this plan includes all operational and environmental GIS data, photography, video, remote sensing, response sampling, and response databases created, acquired or possessed by the UC used to make response decisions or to support the generation of the COP and the Situation Status Display. The plan excludes sharing of investigation, criminal, and other confidential information.

SECTION 11 – Natural Resource Damage Assessment and Restoration

11.0 General Summary

The trustee agencies for natural resources affected by an oil spill are responsible for determining and quantifying injuries to, destruction of, or loss of use of those natural resources, and the services those natural resources provide. This process is called Natural Resource Damage Assessment (NRDA). Agencies may pursue damages for the loss of use and enjoyment of natural resources, public beaches, and other affected public resources.

NRDA activities generally do not occur within the structure of the UC. The UC is focused on response while the goal of NRDA is to assess and restore injured resources. Since initial NRDA field assessment activities may overlap those of the response activities, close coordination and cooperation between the two efforts is necessary (see IMH, Ch. 20, Oil Spill). As detailed in the IMH, an NRDA Representative will coordinate with the UC via the Liaison Officer. The NRDA Representative will be the primary point of contact for establishing communication channels between the NRDA and the response UC.

The Federal Oil Pollution Act of 1990 (OPA 90) requires designated State and Federal trustees to assess natural resource damages and implement a plan to restore injured resources [33 USC §2706]. For OPA 90 purposes, the Governor of California has designated the Secretary of the Natural Resources Agency and the Secretary of the Environmental Protection Agency as California's natural resource trustees. The OPA 90 trustee authority of the Natural Resources Agency Secretary for fish, wildlife, and habitat has been further delegated to CDFW. California law also designates CDFW to be the trustee for the state's wildlife [FGC §711.7].

The California trustee agencies typically involved in large oil spill damage assessments include the CDFW, the State Lands Commission (SLC), and the Department of Parks and Recreation (Parks). The Federal trustee agencies generally include the Department of the Interior (DOI) through the US Fish & Wildlife Service (USFWS), Bureau of Land Management (BLM) and/or the National Park Service (NPS); and the Department of Commerce through the National Oceanic and Atmospheric Administration (NOAA) and/or the National Marine Fisheries Service (NMFS). Federally recognized tribes may also be trustees under federal law.

The Administrator must coordinate all actions of State or local agencies to assess injury to, provide full mitigation for, or to restore, rehabilitate or replace natural resources injured by an oil spill [GC §8670.7(h)(2)(A); §8670.62]. This coordination also includes an invitation to the California Coastal Commission or the San Francisco Bay Conservation and Development Commission, as applicable according to jurisdiction, to participate in the natural resource damage assessment process [GC §8670.7(h)(2)(B)].

For large spills, the trustees generally coordinate their NRDA efforts by following OPA 90 guidelines [15 CFR Part 990]. OPA 90 rules require the trustees to invite the RP to participate in a cooperative NRDA. The trustees will form an NRDA team and are often joined by a RP representative. Generally, the trustees also try to coordinate restoration planning and implementation with local agencies.

SECTION 12 – Response Funding and Cost Recovery

12.0 General Summary

The person or entity that caused the spill or who owns the oil will likely be deemed responsible for all costs incurred by spill responders related to the incident including, but not limited to, costs for containment, cleanup, disposal, remediation, and rehabilitation, in addition to any other liability which may be provided for by law [e.g. GC §8574.4, §8670.56.5; FGC §2014, §5655].

If the Responsible Party is unable or unwilling to pay for adequate cleanup, there are several state and federal funding sources available to government agencies to pay for response and cleanup of oil spills which are described below (see section 6000 of the RCP).

State agencies designated to implement this Plan must document and account for all State expenditures made under the Plan with respect to each oil spill [GC §8574.4]. In particular, State and local agencies must pay attention to accurately documenting their costs incurred during the response in order to successfully recover those costs from the RP or an available fund.

State and local agencies must use and participate in SEMS, otherwise they will not be allowed to assert a claim for response costs against a particular oil spill response fund [GC §8607].

Regardless of the state funding source, expenditures that are recovered or reimbursed from the Responsible Party or another source should be deposited into the fund from which they were expended. The following subsections describe some oil spill state and federal funding options.

12.1 State Funds

Fish & Wildlife Pollution Account
[FGC §12017 and §13010]

The Fish & Wildlife Pollution Account (FWPA) is administered by CDFW. The FWPA has no dedicated funding source; it receives money through successful cost recovery and penalties collected from the RP. Monies in the FWPA are continuously appropriated to CDFW. Funds in the account shall be expended for the following purposes:

- Abatement, cleanup, and removal of pollutants from the environment
- Response coordination, planning, and program management
- Resource injury determination
- Resource damage assessment

- Economic valuation of resources
- Restoration or rehabilitation at sites damaged by pollution

The FWPA may be expended for cleanup and abatement if a reasonable effort has been made to have the RP pay cleanup and abatement costs, and funds are not available for disbursement from the emergency reserve account of the Toxic Substances Control Account in the General Fund [HSC §78240 (formerly §25354)]. CDFW may use funds in the FWPA to pay the costs of consultant contracts for resource injury determination or damage assessment during hazardous material spill emergencies.

Oil Spill Response Trust Fund
[GC §8670.46 to §8670.48]

The Oil Spill Response Trust Fund (OSRTF) is continuously appropriated to the Administrator for expenditure without regard to fiscal years, and the Administrator shall manage the OSRTF. The OSRTF is funded by a fee imposed on every barrel of oil coming into California over or through waters of the state. Whenever OSPR physically responds to a spill, verifies it is a spill, and investigates the spill, this fund will be opened. The OSRTF is available for oil spills or an imminent threat of an oil spill for the following purposes:

- Provide funds to cover promptly the costs of response, containment, and cleanup of oil spills into waters of the state, or to respond to an imminent threat of an oil spill
- Cover response and cleanup costs and other damages suffered by the State or other persons or entities from oil spills into waters of the state, which cannot otherwise be compensated by the RP or the federal government
- Pay claims for damages where there is a final judgment that has not been paid, or where the RP cannot be ascertained or is otherwise not liable, or where the claim has been rejected by the Federal Oil Spill Liability Trust Fund and the RP refuses to pay, or claims under $50,000.
- Pay indemnity and related costs and expenses associated with claims against persons or companies providing authorized and appropriate response efforts
- Pay for the costs of rescue, medical treatment, rehabilitation, and disposition of oiled wildlife, as incurred by the OWCN
- Cover the costs of assessing the impact on human consumption of fish and shellfish species impacted by oil spills [FGC §5654].

State Water Pollution Cleanup and Abatement Account
[WC §13440 to § 13443]

In the State Water Quality Control Fund, there is a State Water Pollution Cleanup and Abatement Account (SWPCAA), administered by the SWRCB. The funds in the SWPCAA are available for the following purposes in all state waters as follows:

- The first unencumbered five hundred thousand dollars ($500,000) paid into the SWPCAA in any given fiscal year is available without regard to fiscal years, for expenditure by the SWRCB for cleanup purposes.

- The next unencumbered five hundred thousand dollars ($500,000), or any portion thereof, deposited in any given fiscal year, is available for expenditure by the SWRCB for cleanup subject to the provisions set forth in Section 28 of the Budget Act of 1984.
- The next unencumbered one million dollars ($1,000,000) deposited in the SWPCAA in any given fiscal year is available for expenditure by the SWRCB to a RWQCB that is attempting to remedy a significant unforeseen water pollution problem, posing an actual or potential public health threat, or is overseeing and tracking the implementation of a supplemental environmental project required as a condition of an order imposing administrative civil liability, and for which the RWQCB does not have adequate resources budgeted.
- The remaining unencumbered funds deposited in the SWPCAA in any given fiscal year are available without regard to fiscal years to the SWRCB for expenditure, upon application by a public agency or tribal government with authority to clean up a waste or abate the effects of a waste, to the agency or tribal government in assistance in cleaning up the waste or abating its effects on waters of the state. The agency or tribal governmental shall not become liable to the SWRCB for repayment of such monies.

Toxic Substances Control Account – Emergency Reserve Account
[HSC §78240 (formerly §25354); §25173.6; §78165 (formerly §25324]

DTSC administers the Toxic Substances Control Account (TSCA). Each fiscal year one million dollars ($1,000,000) is to be continuously appropriated from the TSCA to DTSC as a reserve account for emergencies.

DTSC shall expend moneys available in the reserve account only for the purpose of taking immediate corrective action necessary to remedy or prevent an emergency resulting from a fire or an explosion of, or human exposure to, hazardous substances caused by the release or threatened release of a hazardous substance, but that does not include oil. Regardless, a spill of both oil and other hazardous substances in the same event can trigger the use of this account.

12.2 Federal Funds

Oil Spill Liability Trust Fund
[33 USC §2712 - §2713; 26 USC §9509].

The USCG's National Pollution Fund Center (NPFC) administers the Oil Spill Liability Trust Fund (OSLTF). The NPFC is responsible for disbursements and proper use of the OSLTF, 24 hours a day, every day, so that the FOSC can immediately respond to a discharge or monitor prompt and effective cleanup activities by the RP. In the event of an oil spill in California, this fund may or may not be opened, but OSPR does not wait for a determination of that before opening California's OSRTF. Per GC §8670.49(a)(3), the OSRTF may be opened as long as

there is a reimbursement process with the OSLTF in place. This allows OSPR flexibility in responding and incurring expenses immediately.

OSLTF uses are delineated by OPA 90 to include:

- Removal costs incurred by the USCG and US EPA
- State access for removal activities
- Payments to Federal, State, and Indian tribe trustees to conduct natural resource damage assessments and restorations
- Payment of claims for uncompensated removal costs and damages
- Research and development
- Other specific appropriations

The OSLTF has two major components:

- The OSLTF is available for FOSCs to cover expenses associated with mitigating the threat of an oil spill, as well as the costs of oil spill containment, countermeasures, cleanup, and disposal activities and for federal trustees to initiate natural resource damage assessments. This portion of the OSLTF is a recurring $50 million dollars available to the President annually.
- The remaining principal OSLTF balance is used to pay claims and to fund appropriations by Congress to Federal agencies to administer the provisions of OPA, and support research and development.

SECTION 13 – Government Agencies

13.0 Local Government

Overview and Planning
Although the RP may ultimately be responsible for the response and cleanup efforts, they may not always be first on scene. For most oil spills, county and municipal government agencies will be the first notified and the first to respond.

Incident management responsibility will vary depending on the specific statutory authority for each local government or agency. The local government descriptions contained in this Plan are typical of county and municipal jurisdictions throughout the state.

For most oil spills, OSPR will perform the SOSC function, and a local government representative may serve as the Local Government On-Scene Coordinator (LGOSC) for the incident. Local governments may establish a Local Government Regional Coordination Group to nominate a qualified representative from among its member agencies to serve as the LGOSC in the UC. The LGOSC will present this group's 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. Any LGOSC participating in the UC must have authority to make tactical spill response decisions independent from consultation with city councils or boards of supervisors.

When an oil spill occurs, the UC shall evaluate the nature and severity of the spill, jurisdictions that may be affected, potential for public involvement, and need for local agency support. The UC may exercise the option to appoint a LGOSC as a participant within the UC. For more details see Section 2000 of the relevant ACP.

Local government can provide valuable experience in pre-incident planning through the local Certified Unified Program Agency (CUPA) or Participating Agency (PA) and other local planning activities. The County/City Emergency Services Coordinators, Local Disaster Councils, and similar organizations are encouraged to participate in multi-agency planning activities related to oil spills, and to develop and revise response plans prior to the occurrence of an oil spill.

Through CUPAs or PAs, local area response plans must be developed; local agencies can clearly delineate responsibilities with respect to each other and with participating federal and state agencies; and key liaisons between agencies can be established. In California, the federal LEPCs are established at the six Mutual Aid Regions level. Cal OES implemented a Regional HazMat Planning Framework at the LEPC region level that coordinates larger events. Local governments with jurisdiction over or directly adjacent to state waters, may apply to the Administrator for a grant to complete, update, or revise an oil spill contingency plan element of their business and hazardous materials area plans [GC §8670.35]. Local

agencies with an operational role in spill response are encouraged to exercise, revise, and update their local plans on a regular basis. Local response plans should be consistent with the local government's local coastal program as certified under Section 30500 of the Public Resources Code, the California oil spill contingency plan, the National Contingency Plan, and the Area Contingency Plan.

Local Response Equipment
Equipment used by local and regional agencies in oil spill response and cleanup can be found in the specific county's oil spill contingency plan. These local plans must list all available emergency response supplies and equipment under their control [Title 14, CCR §852.62.2(b)(1)(E)]. OSPR provides grants to local government entities, special districts, and native tribes to provide oil spill response equipment that can be pre-positioned (pre-staged) adjacent to waters of the state. The equipment is deployed by the grantee to contain a spill and/or to protect local resources.

Also, local resources information can be found in the section 5000 (Logistics) of the ACP.

Certified Unified Program Agencies and Participating Agencies (CUPA or PAs)
All counties and a number of cities within California have been designated to implement the state and federal hazardous materials emergency planning and community right-to-know programs -- these program functions are performed by CUPAs and PAs [27 CCR §15100, et seq.]. A list of certified and non-certified CUPAs and PAs has been developed and is maintained by the California Environmental Protection Agency (CalEPA), Unified Program Section (see http://cersapps.calepa.ca.gov/public/directory/).

CUPAs are typically fire departments and environmental health departments that may provide resources and liaison functions during oil spills. CUPAs are responsible for the following local "unified programs", which may include addressing chemical components released by an oil spill:

- Hazardous Materials Area Plans
- Hazardous Materials Business Plan Program
- Underground storage tank (UST) regulation
- Inspection of aboveground storage tanks (AST) storing petroleum products to ensure that spill prevention, control and countermeasure (SPCC) plans are in place, where necessary
- Hazardous waste generator regulation, including most of the state's "tiered permit" requirements
- California Accidental Release Prevention Program (CalARP Program)

Fire Protection
If there is a fire related to an oil spill incident, fire prevention, fire suppression, and rescue are the responsibilities of the fire service agency that has jurisdiction or responsibility for the area involved. Agencies that may be involved include the US Forest Service (USFS), the California

Department of Forestry and Fire Protection (CAL FIRE), county fire departments, municipal fire departments, and local special district fire departments (paid or volunteer).

The fire service agency may also have jurisdictional authority for containment of off-highway oil spills. Many local plans designate the fire department as the oil spill response IC. The Operational Area Fire and Rescue Coordinators are responsible for mobilization of fire and rescue mutual aid resources requested by the responsible fire service agency.

Also, each Sector of the USCG maintains a marine fire or burning vessel response plan (see ACP §8000).

Law Enforcement
For oil spills occurring on city or county roadways, generally the County Sheriff or City Police will serve as the initial IC [VC §2454].

For other oil spills in cities or counties, in the absence of local codes, ordinances, or agreements to the contrary, the County Sheriff or City Police Department could provide law enforcement support during an oil spill, including traffic control and supervision. Some municipalities have contracted with their county Sheriff for law enforcement and traffic control rather than establish a police department.

Federal and State and agencies may have concurrent law enforcement jurisdiction with a county or city.

Public and Environmental Health
Local health agencies are responsible for protecting the public health and often coordinate emergency medical services. County and city health officers have authority within their jurisdictions to take any preventive measures which may be necessary to protect and preserve the public health.

During an oil spill, local health agencies can provide valuable support to the UC, and be actively involved in situations where public and environmental health is threatened by an oil spill, particularly with respect to community air monitoring and beach closures.

Air Pollution Control Districts and Air Quality Management Districts
There are thirty-five (35) local air quality agencies in California (either Air Pollution Control Districts (ACPD) or Air Quality Management Districts (AQMD). Each is overseen by an Air Pollution Control Officer (APCO).

The APCD, AQMD, or APCO may be able to provide advice to UC regarding predicted dispersion of airborne pollutants from an oil spill. Some districts may be able to provide laboratory support to identify substances involved in the incident and/or may be able to provide for the ambient monitoring of certain airborne pollutants, depending upon the incident.

Throughout the response and cleanup process for an oil spill in waters of the state, the Administrator is required to keep the appropriate APCD or AQMD apprised about the oil spill [GC §8670.7]. The UC should coordinate with the affected district(s) to permit in-situ burning [HSC 41801(g)].

Public Works
Local streets and road departments are responsible for maintaining roadways in their jurisdiction and may assist with road closures, cleanup, or decontamination. Local water supply agencies (which may be a public works) are responsible for maintenance of community water systems. They will provide remedial actions in coordination with the RWQCBs and the Department of Water Resources (DWR) when an oil spill incident may affect water sources such as treatment plants and pumping stations. Public works departments are also critical for spills involving storm drains as they have access to storm sewer system diagrams showing input and outfall points, which may be essential for response.

Emergency Medical Services
Local emergency medical care providers (public and private sectors) provide care and transportation for the sick and injured, including victims of contamination. Patient contact should be made with adequate decontamination, as determined by local medical protocols.

Boating and Vessel Traffic Control
The USCG Captain of the Port can direct recreational and commercial vessel movement through navigable waters of the United States, such as waters that are shared by more than one state (e.g., Goose Lake) or waters that are used for interstate commerce (e.g., Lake Tahoe) or waters that empty into the ocean (e.g., Sacramento River) [33 CFR §6.04-8]. For non-navigable waters the US EPA FOSC can direct vessel traffic (e.g., Castaic Lake).

Additionally, local governments may restrict non-essential vessel traffic on waters within their jurisdiction. For non-essential or non-commercial vessel movement restrictions, the UC should contact the County Sheriff (see ACP §3360.2, §9230.6; USCG https://www.pacificarea.uscg.mil/vtssf; section 4080 of the RCP).

Poison Control Centers
Regional Poison Control Centers in California provide 24-hour access to an extensive toxicology library and can provide immediate access to consultants for evaluating health exposures associated with oil spills, including knowledge of hospitals' capabilities for handling oil spill victims.

The Centers can also provide human poison exposure and health-related information to responders, hospitals, and the public (in designated counties).

Other Local Government Entities
Other local agencies, such as Flood Control Districts or Parks and Recreation Departments, should participate in spill response planning and training with the LEPCs, CUPAs, PAs, and other area committees. Agency roles and capabilities should be described in local and regional intra-state response plans.

13.1 State Government

Overview and Planning
In addition to this Plan, state agencies with an operational role at an oil spill should use their agency or jurisdiction specific plan to better accomplish an efficient response. All California state agencies are each required to maintain continuity of operations in the event of an emergency such as an earthquake, flood, or terrorist act, etc. The State Emergency Plan has a matrix of state agency responsibilities, which is available on the Cal OES website at: https://www.caloes.ca.gov/PlanningPreparednessSite/Documents/California_State_Emergency_Plan_2017.pdf, and the annex "California Hazardous Materials and Oil Emergency Function" is found at http://www.calepa.ca.gov/Disaster/HazmatOil/.

California Air Resources Board (ARB)
Responsibilities: California Air Resources Board's (ARB) mission is to protect and enhance the ambient air quality of the state. The ARB monitors, researches, and sets air quality policies for controlling emissions from mobile sources. The ARB works with over thirty (30) regional and county air quality control authorities who set emission standards for stationary sources.

Notification Requirements: Immediate notification to the ARB is required for oil spill incidents that may adversely affect air quality.

Capabilities and Limitations: ARB can assist first responders, on a limited basis, during the release of toxic industrial chemicals or fires that impact nearby communities through its Office of Emergency Response (OER). OER can be requested to conduct air quality assessments in locations surrounding the hot zone to measure the incident's effect on the surrounding community's air quality. OER has limited monitoring response capability for unanticipated releases from industrial sources, but can coordinate with technical experts in the fields of chemistry, plume dispersion modeling, air quality management and air related public messaging, and to assist during these types of incidents. OER is well-equipped to determine smoke impacts to communities from fire by using portable field measurement and meteorological equipment, which report environmental information about the incident. For longer duration incidents, OER can coordinate with other divisions in ARB and outside agencies to provide additional capabilities. This support function may be accessed through direct contact with agency emergency response personnel, or the State Warning Center.

California Coastal Commission (CCC)

Responsibilities: The California Coastal Commission (CCC) exercises authority under the California Coastal Act of 1976 (Coastal Act) to manage the conservation and development of California's 1,100 mile coastline (excluding San Francisco, San Pablo, and Suisun Bays) [PRC §30000 et seq.]. The CCC regulates development activities that occur within the coastal zone. The Coastal Act contains policies for the prevention of and response to oil and hazardous substance spills [PRC §30232]; protection of coastal waters and marine resources [PRC §30214 – 30236]; protection of environmentally sensitive habitats, and rare or especially valuable species of wildlife and plants [PRC §30240 and 30107.5]; and protection of fishing activities [PRC § 30234 and 30234.5].

The Executive Director of the CCC can issue an emergency permit for oil spill clean-up or repair and maintenance activities determined to constitute development under the Coastal Act. Issuing an emergency permit can be accomplished with a verbal approval on scene or by telephone. In addition, activities authorized, funded, or carried out by the federal government that affect coastal zone resources must be reviewed by the CCC for consistency with the California Coastal Management Program, including the Coastal Act [PRC 30330, and 30400]. The CCC is the only state agency which can conduct this review of federal projects and activities.

The CCC reviews oil spill contingency plans and assists the OSPR Administrator with carrying out studies regarding contingency planning, oil spill response equipment, and operations. The CCC may also assist with drills and exercises to test prevention operations, equipment, and procedures. The CCC is also a member of the state's five Harbor Safety Committees (see Section 11.3 herein). The state Oil Spill Technical Advisory Committee (TAC) provides the CCC with recommendations regarding marine oil spill issues [GC §8589.7, §8670.23, §8670.36, §8760.37, §8760.37.5, §8760.55; PRC §8757].

Notification Requirements: The CCC must be notified by the California State Warning Center of any discharge, or threatened discharge of oil in marine waters [GC §8670.25.5(b) and 8589.7(b)].

Capabilities and Limitations: During an oil spill the CCC can provide several types of support:
Technical and/or response assistance (e.g., shoreline assessment, wildlife search and collection, and permitting to facilitate expeditious cleanup)
Assistance to local governments, special purpose districts, and property owners in addressing resource protection issues
Advice regarding preferred response and cleanup activities to avoid or minimize adverse resource impacts to coastal and marine resources

California Environmental Protection Agency (CalEPA)

Responsibilities: The California Environmental Protection Agency (CalEPA) was created in 1991 by Governor's Executive Order and is led by a Secretary. Six Boards, Departments, and Offices (BDOs) were placed within the CalEPA "umbrella" (see ARB, OEHHA, CalRecycle, DPR, DTSC, and SWRCB herein). Also, the RAPID Force was established within CalEPA [PUC §7718; see subsection 11.2 herein].

CalEPA's emergency response and recovery responsibilities concern air quality, waste management, toxic substances, pesticide release or exposure, chemical releases, water quality, and ecosystem effects.

Notification Requirements: CalEPA is required to receive reports of oil spills and related exposures. Notification of CalEPA is generally done through the California State Warning Center and the DTSC duty officer system.

Capabilities and Limitations: CalEPA emergency response activities are coordinated through the Emergency Response Management Committee (ERMaC), which is comprised of a representative from each of CalEPA's BDOs and through the Emergency Function for Hazardous Materials and Oil (EF-10) Annex to the State Emergency Plan. The CalEPA Emergency Operations Center can be opened during a large-scale event by authority of the Secretary or by request of Cal OES. For an oil spill, CalEPA agencies can assist with:

- Scientific support for toxicology, aquatic and ecotoxicology, exposure, and risk assessment
- Debris management
- Air monitoring and modeling (including emergency mobile monitoring and stationary lab capabilities)
- Technical support for surface and groundwater contamination

California Department of Conservation, Geologic Energy Management Division (CalGEM)

Responsibilities: The Geologic Energy Management Division (CalGEM)within the Department of Conservation, is the lead state agency responsible for the supervision and regulation of well drilling and production operations within California. CalGEM's mandates include preventing damage to natural resources that could result from oil, gas, and geothermal drilling, production, or plugging and abandonment operations. CalGEM maintains records of the operator, location, production and injection data, and construction details for all oil, gas, and geothermal wells, plus location and capacity information for tanks associated with oil production operations.

Notification Requirements: Blowouts, fires, serious accidents, and significant gas or water leaks resulting from or associated with oil or gas drilling or producing operations, or related facilities, must be promptly reported to the appropriate CalGEM district office [14 CCR §1722(h)(i)].

However, regarding spills in oil fields in the San Joaquin Valley, there is a unique field rule regarding oil spills that must be reported:

- Spills of any amount that threaten state waters
- 5 bbls or more which are uncontained (state waters not threatened)
- 10 bbls or more within containment (state waters not threatened)
- Any spill involving a fire or explosion

An operator who spills oil in amounts less than the San Joaquin Valley Oil Spill field rule volumetric thresholds is exempt from all other applicable state and local reporting requirements [PRC §3233]

Capabilities and Limitations: Regarding a pollution incident resulting from a drilling or production facility, CalGEM can help determine the owner/operator, and advise on appropriate actions necessary to control and secure the source.

California Dept. of Fish & Wildlife (CDFW) Office of Spill Prevention and Response (OSPR)

Responsibilities: The California Department of Fish and Wildlife (CDFW) has public trust responsibility for the state's wildlife and habitat. The Fish & Game Commission and CDFW collectively have enforced water pollution laws since the early 1900s. The first Fish & Game Code was codified in 1933; the oil pollution provisions trace back to the 1915 Penal Code.

The Office of Spill Prevention and Response (OSPR) began operations in 1991 [GC §8670.1 et seq.] as a division of CDFW, following passage of the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 (the Act). The Act established an Administrator, appointed by the Governor, who has primary state authority to direct all aspects of prevention, removal, abatement, response, containment, and cleanup efforts for any oil spill into waters of the state. The Administrator is also a Chief Deputy Director of CDFW.

The OSPR Administrator is the State On-Scene Coordinator to direct removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any placement of oil in waters of the state or where wildlife may be affected [FGC §5655(d); GC §8670.7].

The Administrator is mandated with maintaining this State Oil Spill Contingency Plan [GC §8574.8].

The Director of CDFW, in consultation with the Administrator and OEHHA, has authority to close fisheries during oil spills [FGC §5654].

Notification Requirements: OSPR will be notified through the California State Warning Center.

Capabilities and Limitations: OSPR performs the following responsibilities:

- The Administrator is the SOSC for oil spills in state waters
- Qualified staff fill positions within the ICS UC structure

- Through the RRT, approves the use of any chemical oil spill cleanup agents proposed for use in waters of the state (i.e., dispersants, bioremediation agents, biodegradable agents, herding agents, etc.) [GC §8670.13.1]
- Determines when removal and cleanup actions are complete regarding wildlife and habitat impacts
- Conducts criminal and civil investigations
- Performs injury determination and damage assessment for natural resources held in public trust; seeks rehabilitation, restoration, and/or mitigation for injury caused by a spill
- Maintains expertise including law enforcement, scientific, biological, operational, maritime, and legal professionals

California Department of Forestry and Fire Protection (CAL FIRE)

Responsibilities: California Department of Forestry and Fire Protection (CAL FIRE), which includes the Office of the State Fire Marshal's Pipeline Safety Division (OSFM PSD) has the authority to respond to and investigate ruptures, fires, or similar incidents, involving intrastate hazardous liquid pipelines. OSFM PSD has the ability to enforce Federal pipeline safety regulatory requirements [49 CFR, Part 195]. OSFM PSD maintains maps of all regulated intrastate pipelines in the State Pipeline Mapping System.

Notification Requirements: Immediate notification is required from the California State Warning Center for all oil and hazardous liquid pipeline ruptures.

Capabilities and Limitations: In the event of an oil spill with a fire, CAL FIRE could perform fire protection, suppression, investigation, and prevention duties. CAL FIRE may provide:

- Incident Management Teams
- Mobile Communications Units and logistical support
- Support to local firefighting agencies in accordance with fire mutual aid agreements
- HazMat trained personnel
- Emergency response hand crews
- Law enforcement personnel (CAL FIRE has statewide peace officer powers and authority to enforce all California criminal statutes)
- Explosive ordnance disposal technicians
- Pipeline safety inspectors/investigators
- Fire investigators
- Fixed and rotary wing aircraft

California Department of Industrial Relations Division of Occupational Safety & Health Administration (Cal/OSHA)

Responsibilities: The primary responsibility of Cal/OSHA is to prevent and regulate occupational exposures and injuries in the workplace; this includes the health and safety of people responding to an oil spill [8 CCR §5192]. Cal/OSHA also has the responsibility to assess when fewer than 24 hours of training is allowable for post-emergency clean-up workers.

Notification Requirements: Immediate verbal notification to Cal/OSHA is required of employers when there is an exposure to a regulated carcinogen, serious injury, illness or death of an employee during any work activity, including those performed at an oil spill.

Capabilities and Limitations: Regarding oil spills, Cal/OSHA can advise the UC regarding regulatory compliance issues.

California Department of Parks and Recreation (State Parks)

Responsibilities: The Department of Parks and Recreation (State Parks) is responsible for state parks, beaches, and certain historic sites and is a trustee agency.

Notification Requirements: State Parks must be notified if an oil spill incident may impact a State Parks unit.

Capabilities and Limitations: State Parks can provide Agency Representatives, peace officers, firefighters, environmental scientists, HAZMAT first responders (Operational), oiled wildlife rescuers, volunteer management support personnel, and vessels with operators.

California Department of Toxic Substances Control (DTSC)

Responsibilities: The Department of Toxic Substance Control (DTSC) regulates the handling, storage, treatment, and disposal of hazardous wastes. Oil and petroleum products must be handled, stored, labeled, and transported, similar to other hazardous materials and substances. However, for purposes of cleanup, a spill of oil or petroleum that is a product or commodity is not addressed under the laws and regulations implemented by DTSC. Instead, oil spill cleanup laws such as found in the Fish and Game Code, the Government Code, or the Water Code must be used to provide authority for cleanup. Yet, the spilled contaminated oil (e.g., dirt mixed in with diesel) must comply with DTSC's waste handling, storage, treatment and disposal requirements.

Notification Requirements: Immediate notification, pursuant to facility contingency plans, is required for releases from permitted treatment, storage, and disposal facilities.

Capabilities and Limitations: Can provide technical advice regarding the safe handling or appropriate disposal of toxic materials.

California Governor's Office of Emergency Services (Cal OES)

Responsibilities: Cal OES is responsible for coordinating the mitigation, preparedness, response, and recovery activities related to disasters and homeland security measures. Cal OES is delegated substantial emergency duties under the California Emergency Services Act. Cal OES coordinates mutual aid within the state and is also responsible for maintaining a day-to-day working relationship with local emergency management organizations.

The state is divided into six mutual aid regions that are managed by three Cal OES Regional Operations Centers (REOCs): Southern, Coastal, and Inland. Cal OES also operates the State Operations Center (SOC).

Cal OES is also responsible for maintaining the California State Emergency Plan to address the State's response to extraordinary situations associated with natural and human-caused disasters, and technological incidents.

Notification Requirements: A person responsible for an oil spill or threatened release must report the spill to the California State Warning Center [HSC §25510; 19 CCR §2701; GC §8670.25.5]. Once notified, Cal OES will then immediately contact the appropriate federal, state, and local agencies of the incident according to pre-determined procedures and criteria. Some laws and regulations specifically identify which agencies Cal OES must notify in the event of a specific type of release

Capabilities and Limitations:

- Cal OES operates the California State Warning Center on a 24-hour a day, seven day a week, basis as the central notification and reporting system for the State of California
- REOCs can manage and coordinate information and resources among operational areas within the mutual aid regions and between operational areas and the state
- Cal OES personnel can be requested to support local emergency officials (i.e., incident information and emergency management personnel)
- Cal OES can provide support working directly with the Liaison Officer, assisting with selection of Local Government representatives to the UC and providing communications, mutual aid, and Mobile Command Posts
- Cal OES can assist local agencies in accessing mutual aid resources (e.g., fire, law, coroner, etc.). Requests must be made according to the State Emergency Plan and SEMS.

California Highway Patrol (CHP)

Responsibilities: CHP serves as the IC or part of the UC for oil spills that occur on all state highways, at state buildings and on state grounds, even if located within political boundaries of a county or municipality. The CHP may be the IC for oil spills that occur on city and county roads if the local authorities enter into such an arrangement with CHP.

CHP's authority does not include state properties where any other agencies have specific jurisdiction, such as the University of California or state hospitals under the Department of Mental Health.

Notification Requirements: Immediate notification is required for any oil spills that occur within the jurisdictional boundaries of the CHP. The CHP will subsequently notify Cal OES and Caltrans, or local street and road departments, as appropriate. In situations where another agency first becomes aware of an incident within CHP jurisdiction, the CHP must then be notified.

Capabilities and Limitations: CHP will not normally provide incident coordination support for oil spills that occur outside its jurisdiction. CHP capabilities include the following:

- Evaluate and report road conditions
- Provide traffic control and rerouting
- Prevent unauthorized entry into contaminated areas
- Provide law enforcement

California Public Utilities Commission (PUC)

Responsibilities: The Railroad Operations and Safety Branch of the California Public Utilities Commission (PUC) has responsibility and authority for investigation of railroad accidents, which includes oil spills. It performs railroad safety oversight of daily operations and inspections of new and existing facilities for compliance with the PUC General Orders and with Federal Requirements. Internal staff investigation reports are required. These reports can result in a formal Commission Investigation [PUC §315].

Notification Requirements: Immediate notification is required via the California State Warning Center for railroad accidents.

Capabilities and Limitations: The headquarters office and field offices throughout the state provide field investigators to conduct on-site investigations of transportation incidents.

California Volunteers

Responsibilities: California Volunteers is the state service commission responsible for volunteer management and non-governmental organization coordination. For oil spills, California Volunteers is the designated statewide mutual aid coordinator for volunteer resources which includes both spontaneous and affiliated volunteers.

Notification Requirements: Notification for large oil spills by OSPR or Liaison Officer.

Capabilities and Limitations: California Volunteers assists with the management of spontaneous volunteers through coordination with public, private, and nonprofit organizations, including state, local, and tribal governments; voluntary agencies; and volunteer referral agencies. California Volunteers is the designated statewide mutual aid coordinator for volunteer resources and as such would staff the Volunteer Coordination Branch in the Operations Section at the Cal OES State Operations Center and Regional Emergency Operations Centers. California Volunteers can also deploy AmeriCorps resources to support oil spill response and recovery.

Office of Attorney General (AG) Department of Justice (DOJ)

Responsibilities: The AG represents the people of California in civil and criminal matters, and represents most state agencies in civil litigation. DOJ carries out the responsibilities of the AG.

Notification Requirements: None, unless a state agency requests the immediate involvement of the AG.

Capabilities and Limitations: The AG/DOJ may assist with obtaining injunctions, criminal intelligence, evidence gathering, provide surveillance, communications equipment, forensic services, and provide legal advice to state agencies.

Office of Historic Preservation

Responsibilities: The State Parks Office of Historic Preservation (OHP) is responsible for administering federally and state mandated historic preservation programs statewide, including ensuring compliance with agency regulatory obligations and maintaining a statewide inventory of cultural resources.

Notification Requirements: Contact the appropriate Regional Information Center(s) (RIC) in the event of a spill. The RIC contact list is online at http://ohp.parks.ca.gov/pages/1068/files/IC_Roster.pdf, and each RIC's service area is defined by counties. Contact the CHRIS Coordinator if an RIC cannot be reached

Capabilities and Limitations: OHP and the RICs can advise the UC regarding cultural resource locations. They cannot provide onsite services. Delivery of data can be done in a variety of ways, but requires coordination with the RIC, and if necessary, OHP.

Office of Environmental Health Hazard Assessment (OEHHA)

Responsibilities: OEHHA provides scientific information and advice upon which to base public health risk management decisions.

For oil spills into waters of the state, OEHHA will provide health assessments and recommendations concerning the closure and re-opening of fisheries [FGC §5654; §7715]. This is described in a CDFW/OEHHA Fisheries Closure Joint Protocol for Marine Oil Spills.

Notification Requirements: OEHHA is notified of oil spills directly by OSPR, generally by the OSPR Fisheries Closure Technical Specialist.

Capabilities and Limitations: OEHAA can assist responders in assessing and characterizing risks to public health and the environment from oil and chemical spill releases and provide health risk information to responding agencies. Generally, OEHHA supports larger scale chemical emergency responses. In the event of a freshwater or marine spill, OEHHA will assess the risks from fishing and consuming fish in the impacted area and make a recommendation to the Director of CDFW as to whether closure of commercial and recreational fishing is necessary to protect public health. In general, OEHHA does the following:

- Provides chemical risk characterization information
- Provides health information to UC staff, and as appropriate, to the news media and release public health advisories
- Assists responders in assessing potential exposures for decisions on sheltering-in-place, evacuation, and re-entry
- Assist in environmental fate assessment, determining health and environmental consequences of breakdown products, reaction products, and inter-media transfers
- Assists with environmental sampling following oil spills requiring expedited sampling and provides consultation on residual risks associated with remediation
- Supports local health agencies and health professionals following chemical releases by providing toxicological information

San Francisco Bay Conservation & Development Commission (BCDC)

Making San Francisco Bay Better

Responsibilities: BCDC has planning, permitting and enforcement authority over development within San Francisco, San Pablo, and Suisun Bays and within a 100-foot wide band of the surrounding shoreline [GC §66600 et seq.; PRC §29000 et seq.].

BCDC can review proposed local government oil spill contingency plans, vessel and facility oil spill contingency plans, and proposed regulations. BCDC is also represented on the San Francisco Harbor Safety Committee. BCDC must assist the OSPR Administrator with studies regarding improvements to oil spill contingency planning, response equipment, and operations [GC §8574.9, §8574.10; §8670.23, §8670.36, §8670.37].

Notification Requirements: BCDC must be notified by the California State Warning Center of any discharge or threatened discharge of oil in marine waters within BCDC's jurisdiction [GC §8670.25.5(b)].

Capabilities and Limitations: BCDC staff can provide technical assistance based on local knowledge of potential resource impacts, site ownership, and site access.

State Lands Commission (SLC)

Responsibilities: SLC acts as trustee by holding and managing all sovereign lands of the state and is a NRDA trustee agency. SLC has specific statutory jurisdiction over the operation of marine oil terminals located in the state, as well as trustee responsibility at other marine facilities on lands leased from the state. The SLC must consult with the Administrator and other affected local and federal agencies with respect to the rules, regulations, and guidelines regarding marine oil spill prevention [PRC §8755].

SLC reviews oil spill contingency plans of facilities in marine waters to ensure consistency with information provided in their operations manuals.

A written report is required of all lessees after a spill incident is over. This report should include, at a minimum, the source, cause, size of spill, and actions taken.

Notification Requirements: SLC should be notified of oil spills in navigable waters, including harbors, rivers and lakes, at marine terminals (whether onshore or offshore), and at coastal facilities.

Capabilities and Limitations: Lessees are required to maintain cleanup equipment on-site and to provide proper training of personnel. SLC staff provides assistance in determining the cause and amount of material spilled as well as assisting in damage assessments. SLC staff includes a variety of engineering, environmental, geological, biological, boundary determination, and legal professionals. Staff have expertise in offshore oil facility and marine oil terminal operations.

State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB)

Responsibilities: SWRCB has the primary responsibility to protect the state's surface, coastal, and groundwater resources for human use, and regulate water rights. There are nine RWQCBs, one located in each of the nine major watersheds of the state. The RWQCBs are guided by policies established by the SWRCB, and develop basin plans, issue waste discharge requirements, take enforcement action against violators, and monitor water quality.

Notification Requirements: Immediate notification is required by the California State Warning Center to the appropriate RWQCB of all oil spills that enter or threaten to enter any waters of the state. Reports may be required for oil spills as a condition of discharge permits.

Capabilities and Limitations: Support functions may include the following:

- Provide funding for response and cleanup
- Provide technical assistance to the UC
- Conduct water sampling, analysis, and monitoring activities to assist in evaluation and mitigation
- In cooperation with DTSC, designate sites for disposal of oil
- Advise water users of potential risks due to a spill
- Issue cleanup and abatement or cease and desist orders to responsible parties, as appropriate
- Conduct civil investigations

13.2 Independent State Oil Spill Committees and Bodies

Oil Spill Technical Advisory Committee (TAC)

The TAC consists of fourteen appointed members: eight by the Governor, three by the Speaker of the Assembly, and three by the Senate Rules Committee [GC §8670.54 et seq.].

- The TAC provides public input and independent judgment of the actions of the Administrator and has authority to provide recommendations to the Administrator, SLC, CCC, BDCD, CalGEM, OSFM, and PUC regarding oil spill prevention and response rules, regulations, guidelines, and policies [GC §8670.55].
- The TAC may, at its own discretion, study, comment on, or evaluate, any aspect of oil spill prevention and response in the state [GC §8670.55].
- The TAC shall report biennially to the Governor and the Legislature on its evaluation of oil spill response and preparedness programs within the state and may prepare and send any additional reports it determines to be appropriate to the Governor and the Legislature [GC §8670.55].

- All oil spill contingency plan regulations shall be developed in consultation with the TAC [GC §8670.28, §8670.29].
- The Administrator must consult the TAC regarding OSPR regulations and guidelines addressing the adequacy of oil spill contingency plan elements of business and hazardous materials area plans required pursuant to Health and Safety Code section 25503 [GC §8670.35].
- The Administrator must present the recommendations of the OWCN Rescue and Rehabilitation Advisory Board to the TAC upon the request [GC §8670.37.5].
- The TAC may review oil spill contingency plans by the regulated industry [GC §8670.36].
- TAC activities may be funded from the Oil Spill Prevention and Administration Fund [GC §8670.56].

Railroad Accident Prevention and Immediate Deployment Force (RAPID)
The Railroad Accident Prevention and Immediate Deployment Force (RAPID) was established within CalEPA in 1991 [PUC §7713, §7714, §7718]. The express statutory fee schedule for funding this program went inoperative at the end of 1995 [PUC §7714.5], however, the RAPID statutes have not been repealed.

Harbor Safety Committees (HSC)
The Administrator must establish HSCs for harbors and adjacent regions of San Diego; Los Angeles/Long Beach; Port Hueneme; San Francisco; and Humboldt Bay [GC §8670.23].

Each HSC is responsible for planning for the safe navigation and operation of tank ships, tank barges, and other vessels within each harbor. Each must prepare a harbor safety plan, encompassing all modes of vessel traffic within the harbor. Every year each HSC shall revise its respective harbor safety plan and report its findings and recommendations to the Administrator [GC §8670.23.1].

HSCs address any issue affecting maritime safety or security, as appropriate, and to report findings and recommendations on those issues. The Administrator must forward those findings and recommendations to the appropriate authority [GC §8670.23.1].

Pacific States / British Columbia Oil Spill Task Force
The Pacific States/British Columbia Oil Spill Task Force is formed by a Memorandum of Cooperation between the Governors of Alaska, Washington, Oregon, California, Hawaii, and the Premier of British Columbia (see http://www.oilspilltaskforce.org)

- The Administrator is required to enter into discussions on behalf of California for the purpose of developing interstate agreements regarding oil spill prevention, preparedness, and response (see GC §8670.9).
- The Task Force assesses interstate and cross-border issues such as:
- Coordination of vessel safety and traffic
- Oil spill prevention equipment and response required on tank ships and tank barges and at terminals
- Availability of oil spill response and cleanup equipment and personnel
- Crude-by-rail oil spill preparedness
- Monitoring federal legislation and regulations regarding oil spills

Other matters that may relate to the transport of oil and oil spill prevention, response, and cleanup

13.3 Native American Tribes

ICS principles provide for tribal involvement during response activities which occur on tribal lands or land that holds a cultural connection to Native American peoples, where representatives can be part of the UC. Tribes may also be a partner in oil spill planning processes and may be a resource owner (or trustee) should their lands become impacted during an oil spill.

Reporting: Oil spills on tribal lands should first be reported to the National Response Center. A US EPA On-Scene Coordinator should be available to help assess the situation and determine what type of response is appropriate. Since US EPA resources are dispatched from San Francisco, situations that need an immediate response should be handled by tribal or local response resources. Thus tribes without appropriate oil spill response resources should develop agreements with local organizations or agencies that have those capabilities.

Tribal Notification: Oil spills which occur off of federally recognized tribal land may still have the potential to impact cultural resources on traditional ancestral lands. These ancestral lands may be of importance to several federally recognized and non-federally recognized tribes. The CA Public Resource Code (PRC) Section 21073 states "California Native American tribe means a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004." This list may include non-federally recognized tribes.

When it is determined that an oil spill has the potential to impact cultural resources, the Native American Heritage Commission (NAHC) will be called to obtain a contact list of those tribes with a traditional cultural connection to the area of the incident. The listed tribes will then be contacted and invited to participate in the response for the purpose of cultural resource protection. A notification call will also be placed to the CA State Historic Preservation Officer (SHPO).

- CA NAHC: (916) 373-3710
- CA SHPO: (916) 445-7000

The NAHC and SHPO offices are available only during normal M-F business hours. Further information regarding spills and cleanup on tribal land is found in several sources:

- US EPA's Technical Assistance Bulletin Volume 10, Number 2: "SARA Title III On Indian Lands: A Guide to the Emergency Planning and Community Right-to-Know Act"
- The Tribal Environmental and Natural Resource Assistance Handbook (March 1999), developed by the Domestic Policy Council Working Group on American Indians and Alaska Natives, with significant contributions from the Native American Fish & Wildlife Society, provides a compilation of Federal sources available to Tribes for both technical and financial assistance for environmental management (see US EPA's Indian Environmental Office http://www.epa.gov/tribal)
- Native American tribes and Tribal Emergency Response Commissions (TERCs)can obtain technical assistance in emergency planning and response to oil spills fromthe US EPA Region IX office

FEMA has developed an American Indian Tribes and Alaska Native Tribes Policy which outlines government-to-government principles for working together on issues related to disaster preparedness, mitigation, emergency response, and recovery. For additional information on Native American Tribes and emergency response (see https://www.fema.gov/about/organization/tribes). CDFW adopted a Tribal Communication and Consultation Policy to help establish and foster these relationships as well (see: https://wildlife.ca.gov/General-Counsel/Tribal-Affairs).

13.4 Federal Government

Overview

This section provides a synopsis of federal agencies' roles and responsibilities when responding to an oil spill incident. Further information on federal agency roles and responsibilities can be found in the following:

- National Response Framework
- National Incident Management System
- National Oil and Hazardous Substances Pollution Contingency Plan
- Regional Contingency Plans
- Area Contingency Plans

Federal response to an oil spill incident will vary according to the nature of the incident. Many different agencies may be involved, and the agency responsible for coordinating federal activities depends on the circumstances and location of the incident. The two federal agencies with primary oil spill emergency response mandates are the USCG and the

US EPA. Federal agencies can be accessed during an oil spill emergency by calling the National Response Center (see Section I).

Pollution incidents involving oil are addressed in the National Contingency Plan (NCP) [40 CFR Part 300]. Generally, the NCP identifies the FOSC for incidents in navigable waters of the United States as the USCG, and the US EPA for inland areas and non-navigable waters. For major pollution incidents, the National Response System may be activated, as described in the NCP. Also, the NCP calls for RP involvement in the UC (see 40 CFR 300.105(d), 300.135(d), and I(1) Figure 1(a).

The FOSC will be guided by appropriate legislative and regulatory authorities; the national, regional and local contingency plans; and the circumstances unique to each incident, to ensure that pollution response is carried out expeditiously and effectively.

The FOSC may obtain support from numerous private, commercial, and governmental organizations. However, four federal groups were created solely to support and augment the FOSC's staff by providing specialized pollution response expertise. They are the USCG National Strike Force, which includes the Pacific Strike Team, the US EPA Environmental Response Team, the NOAA Scientific Support Coordinators (SSC's), and the USCG Public Information Assistance Team (PIAT).

US Coast Guard (USCG)

The USCG serves as the FOSC for oil spill response and cleanup actions in coastal zones and certain major inland water bodies. This does not include oil spill incidents involving DOD or DOE vessels or facilities. The USCG will monitor removal actions which are being conducted by the RP (see US Department of Homeland Security herein for additional information). The USCG operates the National Response Center and can access federal funding for abating and mitigating releases.

The USCG has some capability to contain and clean up spills through the National Strike Force and the Pacific Strike Team.
FOSC's are encouraged to use the USCG's National Strike Force (NSF) whenever necessary or to augment the FOSC's staff when it is overburdened by a response to a given incident. The strike teams that comprise the NSF can provide communications support, oil spill removal expertise, vessel damage control, and support to monitor removal operations, document costs, and coordinate logistics. The NSF should be contacted by the FOSC when:

- A medium or major discharge has occurred
- Control of the discharge requires the special knowledge or capabilities of the NSF
- Response will require many days to complete removal operations, and augmentation by NSF personnel will release local forces to return to normal operations

- The NSF is also available to assist state and local governments, provided that such assistance does not interfere with supporting FOSCs or other federal agencies

See https://www.dco.uscg.mil/Our-Organization/National-Strike-Force/.

The USCG's Pacific Strike Team (PST) is based at Hamilton Field in Marin County, and is one of three NSF pollution control teams. The PST is equipped and trained to assist in the response to oil or chemical incidents occurring in the western area of the United States. FOSCs frequently activate special teams under the Special Forces Section of the NCP to support response operations. The PST is a special unit of the USCG that specializes in response to oil and hazardous material spills and maintains a large warehouse of response equipment in Novato, California. Their inventory includes mobile command posts, communication equipment, all levels of personnel protective equipment, portable decontamination facilities and an assortment of boats, pumps, skimmers, water booming systems, generators, air monitoring equipment, EMT kits, FOSC Field Documentation Kits, and other response equipment to supplement other resources. It is common practice for FOSC's to assign a qualified PST member as Site Safety Officer. Services available from the PST include the following:

- Technical expertise
- Supervisory assistance
- Cost documentation
- Response to spill incidents
- Deployment of salvage and pollution control equipment
- Training in pollution response techniques

The USCG also co-chairs the Region IX RRT with US EPA. The RRT's area of responsibility includes the marine and inland areas of the states of California, Arizona, and Nevada. Responsibility for long-term removal actions may be transferred to US EPA.
The FOSC must submit to the NRT or RRT a complete report on the removal operation and the actions taken, if requested by the NRT or RRT. The RRT will review the FOSC report and send a copy to the NRT with its comments or recommendations within 30 days after receiving the report. The FOSC report should record the situation as it developed, the actions taken, the resources committed, and the problems encountered with comments and recommendations.

US Environmental Protection Agency (EPA)

The US EPA will respond to oil spills upon request or when state and local capabilities have been exceeded. This does not include oil spills involving DOD or DOE vessels or facilities. The US EPA will monitor removal actions conducted by the responsible party. The US EPA can access federal funding to abate and mitigate releases.

The US EPA's emergency response program is supported by highly trained, experienced, and dedicated federal contractors. Additionally, the FOSC can activate Special Forces and Technical Support Centers to support major spill response and cleanup efforts.

The US EPA does not usually initiate first response actions. Local or state governments under their normal law enforcement and public health emergency powers take these actions.

Emergency Response and Rapid Services (ERRS) contracts are the US EPA's method for hiring cleanup contractors. ERRS contractors can provide labor, equipment, materials, and subcontractor services needed to perform stabilization, cleanup, and recovery activities at oil spills. ERRS also has trained transportation and disposal coordinators. ERRS response managers, technicians, and equipment operators are trained in planning and conducting removal operations, neutralizing chemical spills, excavating, stabilizing or bioremediating contaminated soils, containerizing hazardous wastes, constructing and operating a variety of waste treatment and decontamination systems, and other cleanup operations.

The Environmental Response Team (ERT) is a special team comprised of specialists, scientists, and engineers, based in Las Vegas, NV, Edison, NJ; and Cincinnati, OH. ERT usually becomes involved in unusual and complex environmental response actions. ERT can provide specialized equipment, such as mobile laboratories and highly sophisticated monitoring equipment. ERT will work closely with the FOSC in evaluating the use and effectiveness of cleanup technologies, including bioremediation, low-temperature thermal desorption, water treatment systems, stabilization and solidification, surface washing agents, dispersant use and other technologies. The ERT is responsible for activating the Environmental Emergency Response Unit (EERU), a unit which can provide on-scene equipment capable of removing pollutants from contaminated water, conducting treatment studies, and performing a wide range of analytical capabilities.

The disciplines of the ERT include environmental engineering, chemical engineering, veterinary medicine, chemistry, biology, environmental health, risk assessment, sanitary engineering, and analytical support. Areas of expertise include:

- Determining safety precautions for removal
- Evaluating the nature and extent of contamination
- Identifying hazards of pollutants
- Assessing degree of mitigation/removal required
- Identifying critical and sensitive areas
- Selecting disposal methods and appropriate disposal facilities
- Provides access to special decontamination equipment

The US EPA also chairs the US Oil and Hazardous Substances National Response Team (NRT), and co-chairs the Region IX RRT with the USCG. The Region IX RRT's area of responsibility includes the marine and inland areas of the states of California, Arizona, Hawaii and Nevada, and the Pacific Islands. The US EPA's Region IX headquarters is in San Francisco, California.

Federal Emergency Management Agency (FEMA)

FEMA, under the Department of Homeland Security (US DHS), is the Federal lead agency for the management of Presidentially declared disasters and coordinates with other Federal agencies for disaster response and recovery activities. FEMA administers disaster assistance programs provided under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public law 93-288, as amended. This Act allows FEMA to provide assistance to individuals and to State and Local governments to help them respond to, recover from, and mitigate for the effects of disasters. FEMA serves as the lead agency in the management of response and recovery in affected areas after a major disaster, if requested by the Governor and declared by the President.

Currently, the National Response Framework (NRF) provides for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency. The NRF may be implemented in anticipation of a significant event likely to result in a need for federal assistance and/or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency. An oil spill incident could cause sufficient injury and damage to merit a Presidential declaration or an oil spill incident may be the consequence of a larger encompassing disaster or emergency declaration.

The NRF has several Emergency Support Function (ESF) annexes. ESF #10 is the Oil and Hazardous Materials Response Annex (US EPA as primary agency). ESF #10 provides federal support to State and Local governments in response to an actual or potential release of oil following a major disaster or emergency. As an element of the NRF, ESF #10 may be activated under one of the following conditions:

- In response to a disaster for which the President (through FEMA) determines that federal assistance is required to supplement the response efforts of the affected State and local government; or
- In anticipation of a major disaster or emergency that is expected to result in a declaration of emergency.

After the declaration of an emergency or disaster the President (through FEMA) may direct federal agencies to utilize their authorities and resources in support of local and state emergency assistance efforts to save lives, protect the public health and safety, and to protect property.

FEMA encourages the development and maintenance of federal, state, and local hazard disaster planning and mitigation measures. FEMA also provides related training through the National Emergency Training Center.

13.5 Other Federal Agencies

Department of Defense (DOD)

The DOD will provide assistance in investigations to evaluate the magnitude and severity of discharges or releases on or adjacent to resources under the jurisdiction of DOD. The DOD also documents damage to natural resources under their management authority. The DOD can provide a FOSC for releases of hazardous substances, pollutants, or contaminants from DOD facilities and vessels. The DOD is responsible, as is any federal agency, for cleanup of oil discharged from its vessels and facilities.

Department of Homeland Security (DHS)

The mission of the Secretary of the US DHS is to protect the nation against terrorist attacks. After 9/11, numerous agencies were moved under the oversight of US DHS; the primary US DHS agency, relevant to oil spills, is the USCG. In the event of a natural disaster or other large-scale emergency involving an oil spill, certain US DHS agencies may provide a coordinated, comprehensive federal response and recovery effort. The US DHS assumes primary responsibility for ensuring that emergency response personnel are prepared for any situation.

National Oceanic and Atmospheric Administration (NOAA)

NOAA provides scientific support to the FOSC during incident responses and contingency planning in coastal and marine zones. This support includes assessments of the hazards that may be involved, predictions of the movement and dispersion of oil through trajectory modeling and on-scene observations, and information on the sensitivity of coastal environments to oil. NOAA has developed software programs to assist emergency responders, planners, and Local Emergency Planning Committees (LEPCs) in the management of oil spills. When requested, NOAA may provide Scientific Support Coordinators for responses.

Two divisions of NOAA serve as trustees of specific natural resources: the National Marine Fisheries Service and the National Marine Sanctuary Program. NOAA also has a Damage Assessment and Restoration Program involved in spill NRDA and restoration activities (see: https://www.darrp.noaa.gov/).

The Hazardous Materials Response Branch (HMRB) of NOAA provides the following services:

- Scientific advice to the USCG and the US EPA to minimize the effects of spills and hazardous waste sites affecting the nation's coastal zone

- Planning assistance to the USCG, US EPA, fire departments, and LEPCs in dealing with oil and chemical emergencies

NOAA's Scientific Support Coordinators (SSCs) can augment the FOSC's staff by providing scientific advice and arranging for scientific support on-scene. During a response, the SSC serves under the direction of the FOSC with the responsibility to provide scientific support for operational decisions and to coordinate on-scene scientific activity. Typically, the SSC would be within the Environmental Unit of the Planning Section. Depending upon the nature of the incident, an SSC can be expected to work with government agencies, universities, and industry to compile information that would assist the FOSC in assessing the hazards and effects of spills and developing response strategies. The SSC augments, rather than replaces, the local scientific knowledge. Local teams generally have the advantage of minimal response times, familiarity with the area, and a working rapport with other local entities. On the other hand, oil spill response may become extremely complex and require expertise and resources not usually available at the local level. FOSCs are encouraged to use the SSC as they would use other special forces available to them. SSC assistance can be requested by contacting the regional SSC, identified in the RCP.

During a major incident, the SSC is supported by the NOAA Regional Operation Center located in Seattle, Washington. The SSC can assist in assessing the hazards that may be involved and provides predictions of movement and dispersion of oil through trajectory modelling. The SSC can also provide information on actual or predicted meteorological and hydrological conditions for inland waterways, situational mapping, and resource tracking displays for response planning purposes.

Areas in which the SSC can provide assistance include the following:

- Assessment of adverse effects/mitigation strategies: This assistance is frequently required during the initial phases of an incident when response operations and cleanup strategies are being developed. Activities to protect and mitigate adverse effects on human health and welfare, and the environment include:
    - Liaising with natural resource and chemical experts
    - Modeling of spill trajectories modeling
    - Assessing and advising on the nature, behavior, and fate of oil under various environmental conditions
    - Identifying areas of special biological importance
    - Advising on safety precautions for response personnel
    - Assisting in public relations efforts on scientific issues

- Contingency Planning Assistance: Prior to a spill, considerable information can be provided by the SSC in developing regional and local contingency plans. This information can include the probability that spills originating from a given location will affect specific areas; the location of environmentally sensitive areas; background data on the behavior of various pollutants known to be transported in a given area; and the possible environmental impact of an oil release
- SCAT surveys, and assisting with the determination of when an area is "clean"
- "Section 7" coordination pursuant to the Federal Endangered Species Act

Department of the Interior (DOI)

DOI provides assistance to evaluate the magnitude and severity of discharges on or affecting facilities or trust resources, and in documenting damages to natural resources for which it has trustee responsibilities. Within the Office of Environmental Policy and Compliance, the Regional Environmental Officer is the Secretary of the Interior's Response contact. The various DOI Bureaus may provide assistance during oil spills in accordance with the information provided below:

Bureau of Indian Affairs (BIA)

BIA will assist in obtaining access to Indian land areas as needed for response actions and will coordinate with the incident Liaison Officer to ensure pertinent information is made available to tribal authorities on a timely basis.

Bureau of Land Management (BLM)

BLM is responsible for authorization of entry to, and resource protection of, the land and minerals managed by BLM. BLM provides expertise in emergency response, particularly for fire and hazardous materials incidents. Many BLM offices are equipped to provide assistance with sampling, investigation, surveillance, and security. BLM also has expertise in on-shore energy production, cadastral survey, cultural and historic properties, natural resources, and federal property acquisition and disposal.

Bureau of Reclamation (BOR)

BOR provides advice and information on operation, control, and maintenance of water systems and related resources, including dams, reservoirs, and channels. BOR has expertise in engineering and hydrology

and can provide design services, construction, contracting, oversight, and administration support.

Bureau of Safety and Environmental Enforcement (BSEE)

BSEE works to promote safety, protect the environment, and conserve resources offshore through vigorous regulatory oversight and enforcement. BSEE has expertise regarding offshore drilling and production practices and facilities, and offshore minerals. The BSEE Oil Spill Response Division (OSRD) sets standards for offshore oil spill response through comprehensive planning, integrated industry and government preparedness, and the use of the best available technology.

For oil spills involving Outer Continental Shelf (OCS) facilities, BSEE can assist with source identification, oversee spill abatement, and approves resumption of operations. BSEE OSRD can provide expert advice and assistance on actual or potential releases from offshore oil and gas exploration, production, and transportation facilities and platforms that pose a threat to public health and safety. BSEE maintains computer models for the calculation of pipeline oil discharge volumes.

An owner or operator of a facility located seaward of the coastline on the OCS must immediately notify the National Response Center if an oil spill, regardless of size, is observed originating from the facility, another offshore facility, or an unknown source. If a spill from the facility is of 1 barrel or more, the owner or operator must notify the BSEE Regional Supervisor, Office of Field Operations, without delay [30 CFR §254.46].

National Park Service (NPS)

NPS can provide expert advice and assistance on affected National Park Service managed lands including National Parks, National Recreation Areas, and National Historic Sites. NPS provides advice on and participates in activities affecting historic properties and cultural resources. NPS can provide qualified personnel to be part of a SCAT team, especially in those situations where DOI's resources are affected. When warranted, NPS can provide and maintain closure of park lands affected by the spill. When substantial NPS cultural or natural resources are adversely affected by the spill, NPS may provide a liaison and take on roles within the UC, most likely within the Environmental Unit. NPS also has independent authority under the "System Unit Resource Protection Act" Title 54 USC 700721-700725 for recovery of costs on response actions taken to minimize the destruction, loss, or injury to park system resources.

US Geological Survey (USGS)

USGS has expertise in water quality characterization, oil fingerprinting, submerged oil and oil-particle formation, transport and resuspension of oil in fresh waters, riverine 2D particle transport/hydrodynamic simulations, ecotoxicology, time of travel studies for freshwater systems, and geospatial data collection of visible spill plumes, applicable to spill response events in marine and freshwater environments. In addition, the USGS can provide biological survey assistance for natural resources and contaminants and can contribute distribution information about sensitive species (e.g., seabirds, otters, invertebrates in the marine environment). USGS also provides extensive expertise and information for NRDA (e.g., aerial surveys, abundance estimation, remote sensing).

US Fish & Wildlife Service (USFWS)

USFWS will provide expertise on migratory birds, anadromous fish, certain marine mammals, threatened and endangered species and their habitats, and National Wildlife Refuge lands. USFWS coordinates all federal permitting for hazing, collecting, rescuing, and holding migratory birds, certain marine mammals, and threatened and endangered species. USFWS authorizes entry to, and oversees activities on, national wildlife refuge system lands. USFWS also has dedicated field spill response coordinators and support staff that can provide resources to OSPR in the Planning and Operations Sections of UC, specifically within the Environmental Unit and Wildlife Branch respectively. USFWS also has a Natural Resource Damage Assessment and Restoration program with staff that can serve in the NRDA Liaison position in the UC.

National Transportation Safety Board (NTSB)

NTSB, an independent agency that reports to the US Congress, investigates all major transportation accidents with loss of life, property damage, or special circumstances and determines probable cause. This authority includes the causal factors of oil spill incidents.

US Army Corps of Engineers (Corps)

The Corps will expeditiously process a request for Department of the Army permit under its Regulatory Program should spill response activities necessitate work or structures in navigable waters under Section 10 of the Rivers and Harbors Act or a discharge of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act. In addition, the Corps will, to the extent possible, alter the channel flow volumes of water sources from control structures under their management

authority to reduce the negative environmental effects of a pollution incident or assist in spill response operations

US Department of Justice (DOJ)

DOJ can provide expert advice on legal questions arising from oil spills and federal agency response, and represents the federal government, including its agencies, in litigation.

US Department of Transportation (DOT)

DOT has a responsibility to regulate the transportation of oil and hazardous substances pursuant to the Hazardous Materials Transportation Act.

DOT's Research and Special Programs Administration maintains a Hazardous Materials Information Exchange (HMIX), which is a free computer bulletin board providing valuable chemical information.

Certain agencies within DOT that have some oil spill responsibilities include the following:

Pipeline & Hazardous Materials Safety Administration (PHMSA) The Pipeline & Hazardous Materials Safety Administration (PHMSA) oversees the operation of the nation's pipeline transportation system for natural gas, petroleum, and other hazardous materials, and other transportation modes. PHMSA's mission is to assure safety in design, construction, testing, operation, maintenance, and emergency response regarding pipelines and other transportation modes. PHMSA maps the location of major pipelines, which will help government agencies and industry plan for emergencies and respond more effectively during an incident.

Federal Aviation Administration (FAA)

FAA carries out enforcement of oil and hazardous materials regulations for air transportation. At the request of the UC, the FAA may issue Temporary Flight Restrictions to restrict and control air space over oil spill response areas.

Federal Railroad Administration (FRA)

FRA is responsible for enforcing the federal oil and hazardous material requirements for rail and inter-modal forms of transportation (e.g., truck trailers and containers on railcars). In California, FRA investigators are located in the Sacramento, San Francisco, and Los Angeles areas. California Public Utilities Commission inspectors are also authorized to enforce federal requirements on the behalf of the FRA.

US Navy

The US Navy will provide assistance in procuring pollution response equipment from Navy stockpiles when required by the FOSC.

Navy policy requires Navy commands to report to the National Response Center any discharge of oil which causes a sheen upon or discoloration beneath the surface of the navigable waters of the United States, any other discharge of oil which threatens to reach the navigable waters of the US, and any release of hazardous substances.

The Navy's policy is to respond to Navy spills and to undertake direct and immediate action to minimize the spill's effect. To execute this policy, the Navy uses a three-tier system and a network of response assets. Tier 2 and 3 responses are overseen or directed by the applicable Navy OSC.

The Navy's Office of the Director of Ocean Engineering, Supervisor of Salvage and Diving (SUPSALV) is responsible for all aspects of ocean engineering, including salvage, in-water ship repair, contracting, towing, and diving safety. SUPSALV could be called upon for spills involving vessels.

SECTION 14 – Private Sector

14.0 Businesses

It is the responsibility of a business which uses, generates, processes, produces, packages, treats, stores, emits, discharges, or disposes of oil or petroleum products to develop contingency plans [e.g. GC §8670.28, et seq.; HSC §25503 *et seq*]. Both federal and state regulations require certain vessels, marine facilities, and inland facilities (including railroads) within ¼ mile of waters of the state, to submit oil spill contingency plans.

Emergency response planning for incidents also includes providing employees with proper training and skills to handle in-plant emergencies. These specific mandates and minimum planning regulations are adopted by Cal OES and implemented by local CUPA's or PA's and other regulatory agencies.

Businesses should be involved in the local planning activities related to prevention of oil spills so that preparedness is reasonable and appropriate to make the best use of local resources.

Businesses must abide by local, state, and federal reporting requirements for oil releases. Throughout an incident, businesses should keep the UC informed of information concerning:

- Conditions within the facility which may affect emergency response
- On-site monitoring for extent of damage
- Causation
- Technical advice

14.1 Response and Clean Up Companies

The private sector often has a significant role in oil spill response. Initial containment may require a private contractor who will provide the personnel and equipment required to enter a hazardous area. Private sector responders are often used to clean up a spill after initial containment has been accomplished. Private cleanup companies will usually require a prior financial commitment from an identified RP. However, if a person responsible for an oil spill is unwilling, unable to respond, or cannot be identified, a public agency may have to finance cleanup of the spill.

Some industries have established response cooperatives. For example, cooperatives have been organized by oil companies to provide equipment and trained personnel for response to oil spills. These cooperatives and contractors are pre-positioned at various locations.

Private oil spill cleanup contractors must comply with all applicable laws and regulations. These include adequate insurance, employee safety and training requirements, and compliance with transportation requirements.

If public funds are used to pay for the cleanup, the contracting agency should ensure that the contractor is in compliance with the appropriate requirements. Cost control procedures should be addressed in any use of public funds. All agencies that may interact with cleanup contractors are encouraged to establish relationships with available firms so that access, funding, and disposal issues are resolved prior to an incident.

A private cleanup company needs a US EPA hazardous waste identification number, demonstrating the ability to perform proper disposal of hazardous waste. All counties in California have been issued emergency numbers to utilize. For establishing financial responsibility of a company, many contractors use the Dun and Bradstreet number that is required of businesses that file a business response plan as part of the hazardous materials emergency planning and community right-to-know program.

14.2 State Rated Oil Spill Response Organizations

For oil spill cleanup in California, vessels and facilities generally must use a primary response contractor rated by OSPR, collectively known as Oil Spill Response Organizations (OSROs). An OSRO is an individual, organization, association, cooperative, or other entity that can provide equipment, personnel, supplies, or other services directly related to oil spill containment, cleanup, or removal activities.

A "Rated OSRO" means an OSRO that has demonstrated to the Administrator the ability to provide certain response capabilities [GC §8670.30; 14 CCR §819 et seq.]. A Rated OSRO has received an OSRO Rating Letter from OSPR regarding the services it provides, and the equipment is listed in the OSRO's application. OSRO applications are kept on file with the Preparedness Branch of OSPR (see subsection 12.0). The rating application must include a description of the area of operation for the OSRO, where equipment is stored or moored, and the personnel available to respond. The application also must indicate whether equipment and personnel are company-owned and controlled, or subcontracted (including subcontractor's name), and indicate equipment and personnel that are either used only for spill response ("dedicated") or is not solely limited to response usage ("non-dedicated"). Plan holders that have a contract or other approved means for the booming, on-water recovery and storage, and shoreline protection services of a Rated OSRO do not have to list that OSRO's response resources in their contingency plan.

14.3 State Rated Spill Management Teams

Spill management teams (SMT) are made up of qualified personnel who fill incident command system (ICS) positions during an oil spill response. Facility and vessel owners/operators holding contingency plans with OSPR must identify an SMT that is

certified by OSPR to manage a spill of the reasonable worst-case spill (RWCS) volume listed in their plans [GC §8670.29(b)(8)(A); 14 CCR §830.1(a)(2)]. OSPR began certifying spill management teams in 2022, in accordance with 2017 amendments to the Lempert-Keene-Seastrand Act. The amended Act mandates an SMT certification program to ensure that plan holders retain SMTs that are qualified and available to respond and manage oil spills in coordination with state, local, and federal agencies.

As required by statute [GC § 8670.32(j)], OSPR's SMT regulations (14 CCR §830.1-11) establish criteria for certification that include the number of people provided, timeframes for arrival on-scene, training qualifications, and geographic regions in which SMTs intend to provide services. SMTs are classified into Tiers based upon RWCS volumes, and the requirements for certification are scaled by Tier. A full SMT consists of initial response personnel who can arrive within 8 hours, as well as cascading response personnel who can arrive within 24 hours, and a plan holder's certified SMTs may be comprised of their employees, external personnel from a contracted or parent company team, or a combination thereof to [GC §8670.29(b)(8)(B); 14 CCR § 830.1(a)(3)]. To become fully certified, SMTs must demonstrate that their personnel have requisite training or experience, they can arrive on-scene within the designated timeframes, and they can achieve specified objectives at a planned exercise or real response. Certifications are reviewed every three years [GC § 8670.32(d); 14 CCR § 830.8(b)]; to maintain certification, an SMT must submit an application for renewal, provide training information, and conduct a certification renewal exercise.

14.4 Private Vessels

"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. However, these types of resources are a challenge to utilize because the vessels must meet certain characteristics, crews change over time, vessels are sold, and generally there is no obligation of private vessel owners to prepare for or participate in spill response. Depending upon the task, the vessels need to have adequate deck space and lifting ability to carry the necessary response equipment, and crew must comply with OSHA spill response health and safety requirements.

Per the National Contingency Plan, the National Response Unit of the USCG must coordinate use of private and public personnel and equipment to remove a worst-case discharge, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility [33 USC 1321(j)(2)(C)].

The Fisherman's Oil Response Team (FORT) and the Mariners Oil Spill Team (MOST) were developed in 1990 by the joint effort of Clean Seas and the Ventura County Commercial Fishermen's Association. Marine Spill Response Corporation (MSRC) now maintains contracts with more than 60 commercial fishing vessel owners from San Luis Obispo to Los

Angeles/Long Beach to provide oil spill response in the Santa Barbara Channel and southern Central Coast.

The FORT and MOST programs offer:

- Fishing vessels, ranging in size, on an as available basis for response
- Commercial fishermen trained and certified in oil spill response by Clean Seas
- Vessels that are independently maintained and operated by their own Captain and crew

14.5 Additional Emergency Support Resources

American Chemical Association
The manufacturer of a spilled substance can provide detailed technical information (including special precautions, disposal procedures, etc.) regarding their products and may provide an emergency response team.

Community Awareness and Emergency Response
The Community Awareness and Emergency Response (CAER) program is a non-profit entity of the Chemical Manufactures' Association (CMA). The CAER organization is composed of members of local businesses, industries, utilities, emergency service agencies, related government agencies, and community representatives.

The CAER program encourages chemical plant managers to take the initiative in cooperating with local communities to develop integrated emergency plans for responding to incidents. Because chemical industry representatives can be especially knowledgeable during the planning process and because many chemical plant officials are willing and able to share equipment and personnel during response operation, community planners should seek out local CMA/CAER participants. Even if no such local initiative is in place, community planners can approach chemical plant managers or contact CMA and ask for assistance.

Chemical Transportation Emergency Center
The Chemical Transportation Emergency Center (CHEMTREC) is a 24-hour public service of the Chemical Manufacturers Association. It can provide the following:

- Immediate technical emergency response information concerning the product(s) involved
- Precautionary information
- Assistance in identification of petroleum components, if the manufacturer is known or shipping papers are present
- Immediate notification of manufacturers or shippers through their emergency contacts or notification of industry mutual aid networks.

Transportation Company Dispatch Centers

Carriers, including railroads, can be contacted for additional technical information and waybill or cargo manifest readouts (when requested, CHEMTREC can accomplish this service). Carriers may also provide assistance with chemical and wreckage removal.

SECTION 15 – Volunteers

15.0 General Summary

State agencies granted authority to implement this Plan may use volunteer workers [GC §8574.3; §8574.7]. In response to oil spills, the Administrator may use volunteer workers in response, containment, and restoration efforts [GC §8670.8.5]. However, the California State Government Volunteers Act declares that it is not the intent of the Legislature that volunteers replace or supplant public employees, where such employees are providing services deemed necessary for the government to perform, but that volunteers add new dimensions to providing of governmental services [GC §§3110-3112].

The primary volunteer emergency management programs are:

- Disaster Services Worker Program, managed by the California Governor's Office of Emergency Services (Cal OES)
- Volunteer Program for Oil Spills, managed by OSPR

The Disaster Service Worker Volunteer Program (DSWVP) is a State-funded program that provides workers' compensation benefits and medical compensation to registered Disaster Service Worker (DSW) during a declared state emergency, volunteers who are injured while performing disaster-related activities, or participating in pre-approved training/exercises. It also provides limited immunity from liability to political subdivisions or political entities as well as the DSW volunteer if a civil suit results from an act of good faith while the DSW was providing disaster-related services. Eligibility for the DSWVP is based on a volunteer's registration with an accredited Disaster Council, Cal OES, or an authorized State Agency. Most cities and all counties in California have established Disaster Councils that are accredited by the California Emergency Council. Affiliation with an accredited Disaster Council and delegated authority from that council are required prior to a jurisdiction administering a disaster service worker volunteer program.

In order to establish eligibility for DSWVP benefits, the DSW must be registered prior to his or her deployment to participate in disaster-related activities, including pre-approved training. The only exception to the pre-registration requirement is an "impressed volunteer" who is directed/ordered to perform disaster-related duties by an authorized government employee. In addition to the pre-registration requirement, the DSW must be deployed/assigned disaster-related activities by the registering authority. Under no circumstances is a self-deployed volunteer eligible for DSWVP benefits.

The State's laws and regulations governing the DSWVP specify the need to provide DSWs with adequate training and supervision. The registering authority is responsible for ensuring the disaster training is commensurate with the duties of the DSW. The registering authority may require the DSW volunteer to participate in training as a condition of remaining an active DSW volunteer.

If the Administrator utilizes volunteers to assist with an oil spill these volunteers are deemed employees of the state for the purpose of workers' compensation [GC §8670.5; LC §3363.5]. The RP is liable for all costs associated with an oil spill, including costs associated with the use of volunteers. The costs associated with the use of registered volunteers may be funded by the state's OSRTF [GC §8670.50]. Any payments for registered volunteer workers' compensation claims shall be made from the OSRTF. The RP is liable for payment of these costs either directly or by reimbursement to the OSRTF [GC §§8670.25, 8670.46 – 8670.53, and 8670.62]. Under no circumstances is a self-deployed volunteer eligible for workers' compensation benefits.

There are three (3) types of volunteers under OSPR's Volunteer Program that may be utilized during oil spills:

- Wildlife pre-trained – An individual affiliated through the OWCN who is trained to assist with the care and rehabilitation of oiled wildlife. Pre-trained volunteers register under OSPR's Volunteer Program during an oil spill.

- Affiliated – An individual associated with either a governmental agency or NGO who has been trained and/or registered for a specific role or function during oil spills. An example of an affiliated organization is the Community Emergency Response Team, managed by city/county government agency.

- Unaffiliated (also known as spontaneous or community members) – An individual who comes forward following an incident or disaster to assist a governmental agency or NGO with response activities during the response or recovery phase without pay or other consideration. By definition, unaffiliated volunteers are not yet associated with a response or relief agency involved in the incident.

Coordination between OSPR's Volunteer Program and the DSWVP (if available) regarding non-wildlife volunteer activities is critical during oil spills. A decision to use volunteers will be made by the UC. Volunteer insurance coverage and liability may be handled differently, depending on response decisions. Volunteer insurance coverage and liability will generally be facilitated by either local government or OSPR. In an oil spill, volunteer liability forms will generally be provided by OSPR. However, if local government assists with volunteer management it may be appropriate to utilize the DSWP volunteer liability forms. The UC should make this determination prior to using volunteers.

15.1 Volunteer Program for Oil Spills

California developed the Non-Wildlife Volunteer Plan (NWVP) through the USCG Sector San Francisco and Los Angeles/Long Beach Area Committees' which details local and state government volunteer management programs, identifies volunteer opportunities and

training requirements, and outlines the structure of the Volunteer Coordinator/Volunteer Unit within the ICS system.

The primary goal of the NWVP is to provide guidance to the UC or IC to consider the safe integration of affiliated and unaffiliated (also known as spontaneous) volunteers into oil spill response for missions other than oiled wildlife.

The current NWVP can found in each ACP at:
https://www.wildlife.ca.gov/OSPR/Contingency

SECTION 16 – Appendices

Appendix A: Acronyms

A
ACP Area Contingency Plan
AG Attorney General
APCD Air Pollution Control District
APCO Air Pollution Control Officer
AQMD Air Quality Management District
ARB California Air Resources Board
ARC American Red Cross

B
BCDC San Francisco Bay Conservation and Development Commission
BIA Bureau of Indian Affairs
BIOS Biogeographic Information and Observation System
BLM Bureau of Land Management
BSEE Bureau of Safety and Environmental Enforcement

C
CA California
CAER Community Awareness and Emergency Response
CalEPA California Environmental Protection Agency
CAL FIRE California Department of Forestry and Fire Protection
CalGEM Geologic Energy Management Division (California Department of Conservation) **Cal OES** California Governor's Office of Emergency Services
Cal/OSHA California Occupational Safety and Health Administration
CalTrans California Department of Transportation
CCC California Coastal Commission
CCR California Code of Regulations
CDFW California Department of Fish and Wildlife
CEC California Energy Commission
CERCLA Comprehensive Emergency Response, Compensation, and Liability Act
CFR Code of Federal Regulations
CHEMTREC Chemical Transportation Emergency Center
CHP California Highway Patrol
CLEMARS California Law Enforcement Mutual Aid Radio System
CNDDB California Natural Diversity Database
COP Common Operation Picture
CUPA Certified Unified Program Agency
CVC California Vehicle Code

D
DOD Department of Defense

DOI Department of the Interior
DOJ Department of Justice
DOL Department of Labor
DOT Department of Transportation
DPR California Department of Parks and Recreation
DPR California Department of Pesticide Regulation
DTSC California Department of Toxic Substances Control
DWR California Department of Water Resources

E
EERU Environmental Emergency Response Unit
EMS Emergency Medical Services
EMSA Emergency Medical Services Authority
EOC Emergency Operations Center
US EPA Environmental Protection Agency
EPCRA Emergency Planning and Community Right-to-Know
ERMA Environmental Response Management Application
ERT Environmental Response Team
ESI Environmental Sensitivity Index
EUL Environmental Unit Leader

F
FAA Federal Aviation Administration
FEMA Federal Emergency Management Agency
FGC Fish & Game Code
FHA Federal Highway Administration
FOSC Federal On-Scene Coordinator
FRA Federal Railroad Administration

G
GC Government Code
GIS Geographic Information System
GRP Geographic Response Plan

H
HAZWOPER Hazardous Waste Operations and Emergency Response
HMIX Hazardous Materials Information Exchange
HSC Health and Safety Code

I
IC Incident Command/Incident Commander
ICS Incident Command System
IH Industrial Hygienist
IMH Incident Management Handbook

J
JIC Joint Information Center
JPA Joint Powers Agreement

L
LEPC Local Emergency Planning Committee

M
MOU Memorandum of Understanding

N
NCP National Contingency Plan
NIMS National Incident Management System
NMFS National Marine Fisheries Service
NOAA National Oceanic and Atmospheric Administration
NPFC National Pollution Fund Center
NPS National Park Service
NRC National Response Center
NRDA Natural Resource Damage Assessment
NRT National Response Team
NSF National Strike Force
NTSB National Transportation Safety Board
NWVP Non-Wildlife Volunteer Plan

O
OEHHA Office of Environmental Health Hazard Assessment
OSC On-Scene Coordinator
OSFM PSD Office of the State Fire Marshal's Pipeline Safety Division
OSHA Occupational Safety and Health Administration, US Department of Labor
OSPR Office of Spill Prevention and Response

P
PC Penal Code
PHMSA Pipeline and Hazardous Materials Safety Administration
PIAT Public Information Assistance Team
PRC Public Resources Code
PST Pacific Strike Team
PUC Public Utilities Commission or Public Utilities Code, depending on context

R
RAPID Railroad Accident Prevention and Immediate Deployment force
RRAPIR Regional Railroad Accident Preparedness and Immediate Response Force

RCP Regional Contingency Plan for Federal Region IX
RP Responsible Party
RRT Regional Response Team
RWQCB Regional Water Quality Control Board

S
SEMS Standardized Emergency Management System
SOSC State On-Scene Coordinator
SLC State Lands Commission
SMARS Statewide Mutual Aid Radio System
SOC State Operations Center
SPCC Spill Prevention Containment and Countermeasures
SSC Scientific Support Coordinator
SSEP OSPR Scientific Study and Evaluation Program
SSSEP OSPR Sensitive Site Strategy Exercise Program
SWRCB State Water Resources Control Board

T
TAC Technical Advisory Committee
Tool Kit Hazardous Materials Incident Tool Kit

U
UC Unified Command
USCG United States Coast Guard
US DHS Department of Homeland Security
US EPA United States Environmental Protection Agency
USFS United States Forest Service
USFWS United States Fish & Wildlife Service
USGS United States Geological Survey
UST Underground Storage Tank

V
VC Vehicle Code

W
WC Water Code
WCOVTRM West Coast Offshore Vessel Traffic Risk Management Project

Appendix B: Letter of Promulgation

LETTER OF PROMULGATION

This California State Oil Spill Contingency Plan was developed pursuant to Government Code §8574.1 et seq. This Plan supersedes and replaces all prior plans. The Plan is a planning tool for coordinating response to oil spills in California, and is in effect as of the date of signature below. Future substantive changes to the Plan will be numbered consecutively and the date of revision noted. Agencies and individuals should review this Plan annually, and may submit any comments or proposed changes to:

Administrator
Office of Spill Prevention and Response
P.O. Box 944209
Sacramento, CA 94244-2090
916.445.9338

December 2022

Julie Yamamoto
Acting Administrator
Office of Spill Prevention and Response

Appendix C: Statutory Requirements

The OSPR Administrator, on behalf of the Governor, is required to establish a State Oil Spill Contingency Plan, and the Administrator is required to implement the Plan. The Plan must provide an integrated and effective procedure to combat the results of major oil spills within the state [GC §8574.1; GC §8574.2; GC §8670.7; GC §8670.5].

There are several topics that are required by statute to be discussed in this Plan. The following table is a cross reference of those topics and where they are addressed in the Plan:

Content	**Plan Section or Explanation**
The Plan must specify state agencies to implement the Plan. GC §8574.2	2.2
State agencies granted authority to implement a Plan adopted under this article may use volunteer workers. GC §8574.3	15
The volunteers shall be deemed employees of the state for the purpose of workers' compensation under Article 2 (commencing with Section 3350) of Chapter 2 of Part 1 of Division 4 of the Labor Code. GC §8670.8.5, GC §8574.3.	15
Any payments for volunteers' workers' compensation shall be made from the OSRTF or State Water Pollution Cleanup and Abatement Account. GC §8670.8.5, GC §8574.3.	15
State agencies designated to implement the State Oil Spill Contingency Plan shall account for all state expenditures made under the Plan with respect to each oil spill. GC §8574.4	12

Expenditures related to an oil spill in waters of the state shall be paid from the OSRTF. All other expenditures shall be from the State Water Pollution Cleanup and Abatement Account in the State Water Quality Control Fund. GC §8574.4	12
If the party responsible for the spill is identified, that party shall be liable for the expenditures accounted for under this section, in addition to any other liability which may be provided for by law, in an action brought by the Attorney General. GC §8574.4	12
The proceeds from an action against a party responsible for an oil spill in marine waters shall be paid into the Oil Spill Response Trust Fund. GC §8574.4	12
The state Oil Spill Contingency Plan must provide for the best achievable protection of the waters of the state and that consists of all of the following elements: GC §8574.7	4, 5, 14.2-14.3
(a) A state **response element** that specifies:	
• The hierarchy for state and local agency response to spills.	3,13
• The element shall define the necessary tasks for oversight and control of cleanup and removal activities associated with an oil spill and shall specify each agency's particular responsibility in carrying out these tasks.	3,13
• The element shall also include an organizational chart of the state oil spill response organization and a definition of the resources, capabilities, and response assignments of each agency involved in cleanup and removal actions in an oil spill.	3, 4,13 *Figure 1* Also in the State Emergency Plan
(b) A **regional and local planning element** that shall provide the framework for the involvement of regional and	3, 4,13

local agencies in the state effort to respond to an oil spill, and shall ensure the effective and efficient use of regional and local resources in all of the following:	*Figure 1*
(1) Traffic and crowd control.	13.0
(2) Firefighting.	13.0
(3) Boating traffic control.	13.0
(4) Radio and communications control and provision of access to equipment.	7
(5) Identification and use of available local and regional equipment or other resources suitable for use in cleanup and removal actions.	13, 14 ACPs
(6) Identification of private and volunteer resources or personnel with special or unique capabilities relating to marine oil spill cleanup and removal actions.	14,15
(7) Provision of medical emergency services.	13
(8) Consideration of the identification and use of private working craft and mariners, including commercial fishing vessels and licensed commercial fishing men and women, in containment, cleanup, and removal actions.	14
(c) A **coastal protection element** that establishes the state standards for coastline protection. The Administrator, in consultation with the State Interagency Oil Spill Committee, the US Coast Guard and US Navy, and the shipping industry, shall develop criteria for	10

coastline protection. If appropriate, the administrator shall consult with representatives from the States of Alaska, Washington, and Oregon, the Province of British Columbia, and the Republic of Mexico. The criteria shall designate at least all of the following:	
(1) Appropriate shipping lanes and navigational aids for tankers, barges, and other commercial vessels to reduce the likelihood of collisions between tankers, barges, and other commercial vessels. Designated shipping lanes shall be located off the coastline at a distance sufficient to significantly reduce the likelihood that disabled vessels will run aground along the coast of the state.	7.1
(2) Ship position reporting and communications requirements.	7.1
(3) Required pre-deployment of protective equipment for sensitive environmental areas along the coastline.	10
(4) Required emergency response vessels that are capable of preventing disabled tankers from running aground.	14.2-.3
(5) Required emergency response vessels that are capable of commencing oil cleanup operations before spilled oil can reach the shoreline.	14.1-14.2
(6) An expedited decision making process for dispersant use in coastal waters. Prior to adoption of the process, the administrator shall ensure that a comprehensive testing program is carried out for any dispersant proposed for use in California marine waters. The testing program shall evaluate toxicity and effectiveness of the dispersants.	5

(7) Required rehabilitation facilities for wildlife injured by (marine) oil spills.	9.4
(8) An assessment of how activities that usually require a permit from a state or local agency may be expedited or issued by the administrator in the event of an oil spill.	9.5
(d) An environmentally and ecologically sensitive areas element that shall provide the framework for prioritizing and ensuring the protection of environmentally and ecologically sensitive areas. The environmentally and ecologically sensitive areas element shall be developed by the administrator, in conjunction with appropriate local agencies, and shall include all of the following:	
(1) Identification and prioritization of environmentally and ecologically sensitive areas in marine waters and along the coast. Identification and prioritization of environmentally and ecologically sensitive areas shall not prevent or excuse the use of all reasonably available containment and cleanup resources from being used to protect every environmentally and ecologically sensitive area possible. Environmentally and ecologically sensitive areas shall be prioritized through the evaluation of criteria, including, but not limited to, all of the following:	10
(A) Risk of contamination by oil after a spill.	10
(B) Environmental, ecological, recreational, and economic importance.	10
(C) Risk of public exposure should the area be contaminated.	10

(2) Regional maps depicting environmentally and ecologically sensitive areas in marine waters or along the coast that shall be distributed to facilities and local and state agencies. The maps shall designate areas that have particularly high priority for protection against oil spills.	10.1-10.2 ACPs
(3) A plan for protection actions required to be taken in the event of an oil spill for each of the environmentally and ecologically sensitive areas and protection priorities for the first 24 to 48 hours after an oil spill shall be specified.	10
(4) The location of available response equipment and the availability of trained personnel to deploy the equipment to protect the priority environmentally and ecologically sensitive areas.	14
(5) A program for systemically testing and revising, if necessary, protection strategies for each of the priority environmentally and ecologically sensitive areas.	10.6
(6) Any recommendations for action that cannot be financed or implemented pursuant to existing authority of the administrator, which shall also be reported to the Legislature along with recommendations for financing those actions.	Recommendations made separately from plan

Questions and Comments

Questions and comments about this Plan may be directed to the following contacts:

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