

Crude Awakenings

Ten Years Later

The Continued Threat of a Major Oil Spill in Southern California

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INTRODUCTION

Although it has been two years since oil began spewing from the failed Macondo Well under the *Deepwater Horizon* drilling platform, the residents of the states bordering the Gulf of Mexico are reminded daily of the spill and its yet fully understood environmental impacts. Litigation is on-going and will likely remain that way for years (the United States Supreme Court was hearing arguments regarding the March 1989 *Exxon Valdez* oil spill as recently as 2008), and new studies are continuing to be published regarding the threatened health of the Gulf and its marine life.

In Southern California, this spill served as an important reminder that disasters are unpredictable, and that government agencies need to be prepared to prevent and respond to complex and large-scale disasters quickly and effectively. Given the amount of oil transported in the waters along the California coast, the *BP Deepwater Horizon* disaster provides particularly relevant and important lessons for Los Angeles and the rest of California on how to prepare for, and prevent, a similarly catastrophic disaster.

This chapter could not have been completed without the help of the members of my Technical Advisory Committee: Dr. Stephen L. Snell, author of *Courts of Admiralty And the Common Law: Origins of the American Experiment in Concurrent Jurisdiction*; and David Pettit of the Natural Resource Defense Council. Many more thanks are owed to Brian Meux of the Santa Monica Baykeeper and the staff of the Marine Exchange of Southern California, especially Executive Director Captain Richard B. McKenna. Finally, I would like to thank the Santa Monica Baykeeper and Los Angeles Sustainability Collaborative organizations for providing me with this opportunity.

Two years ago, the Gulf Coast and our environment paid dearly for the lessons not yet learned. In the days following the *Deepwater Horizon* spill, it seemed as if those who we traditionally look to for answers were among the most confused about who was in charge of stopping the flow of the leaking oil and directing cleanup efforts. The Minerals Management Service (MMS) had failed massively in its role of enforcing environmental safety regulations, BP was pushing blame on two other companies involved in the drilling operation, Transocean and Halliburton, and the government was still being given the run around about exactly how much oil was actually leaking. When the leak was finally plugged and the Obama administration re-purposed the MMS in an attempt to reduce the risks of future catastrophic spill events, the country breathed a sigh of relief. Today the question still remains: did the sealing of the Macondo Well also mark the sealing of the countless holes in oil spill prevention and response policies that exacerbated an already catastrophic event?

This question is especially important to residents of Southern California. Active oil rigs are in operation throughout the area, from inland to offshore.

Numerous tankers carrying crude oil and other refined oil products traverse in and out of the ports of Los Angeles and Long Beach daily and dock less than two miles off our beaches, pumping crude oil to a refinery that sits directly on the beach. While the *BP Horizon* spill is now a distant memory for most residents of the LA area, the question is, should it be? While Southern California might not be home to any deepwater wells, high risks remain that Southern California could face a similarly devastating oil spill just off its coast.

To better understand the scope and scale of those risks, the following chapter investigates just how prepared Southern California is to face a major oil spill off the coast, and investigates the regulatory and policy framework that guides ongoing oil spill prevention programs and response responsibilities. It concludes with several recommendations on how California's prevention policies and response programs could be improved to better protect its coasts from the most serious oil spill risks.

CRUDE AWAKENINGS: CHAPTER 2

OIL SPILL REGULATIONS AND POLICIES

Article III, Section 2 of the United States Constitution grants federal courts jurisdiction over all cases of admiralty and maritime jurisdiction.ⁱ The federal government has exercised this jurisdiction over navigable waters, enacting statutes relating to marine pollution as early as 1899, governing both state and federal navigable waters.ⁱⁱ Since then, numerous federal measures dealing with oil and hazardous materials spill prevention and response have been passed. However, federal jurisdiction is not exclusive and federal measures have been supplemented by local, state and even international measures. The combination of the different levels of government regulation has created a complex web of different acts, regulations and codes, all of which are nuanced, can overlap and can sometimes even cause complications in determining who exactly is in charge of what after an oil spill. This is not unique to environmental regulations but an enduring problem to maritime law overall.

Jurisdiction over maritime matters historically has been complicated. Under the federal Submerged Lands Act, state waters generally extend three nautical miles (from here on only 'miles' is used) out from the coast (the baseline) and includes all control of all resources located in this three mile region. The United States federal government has complete jurisdiction over the territorial sea, which extends out to 12 miles from the baseline, but typically excludes the first three miles covered by state jurisdiction. The contiguous zone extends from the territorial waters up to 24 miles offshore and grants the U.S. jurisdiction over customs, immigration, sanitary and fiscal matters of any vessel in the area. The Exclusive Economic Zone (EEZ) consists of waters from the baseline up to 200 miles offshore. The U.S. federal government has jurisdiction in the EEZ over all living and non-living resources within this zone, such as fish stocks and oil resources, as well as pollution that affects these resources. If the continental shelf extends beyond the 200 miles jurisdiction of the EEZ, control of the mineral resources on or in the shelf is granted to the U.S. under the Outer Continental

Lands Shelf Act. States, however, under the Submerged Lands Act, retain exclusive jurisdiction of the first three miles.

Typically following a significant human-related environmental disaster, such as an oil spill, the government will enact a new regulation or measure. The world's first major oil spill occurred in 1967 off the coast of England when the oil tanker *Torrey Canyon* ran aground and unleashed nearly 37 million gallons of crude oil into the water. This prompted the U.S. to enact the federal National Oil and Hazardous Substances

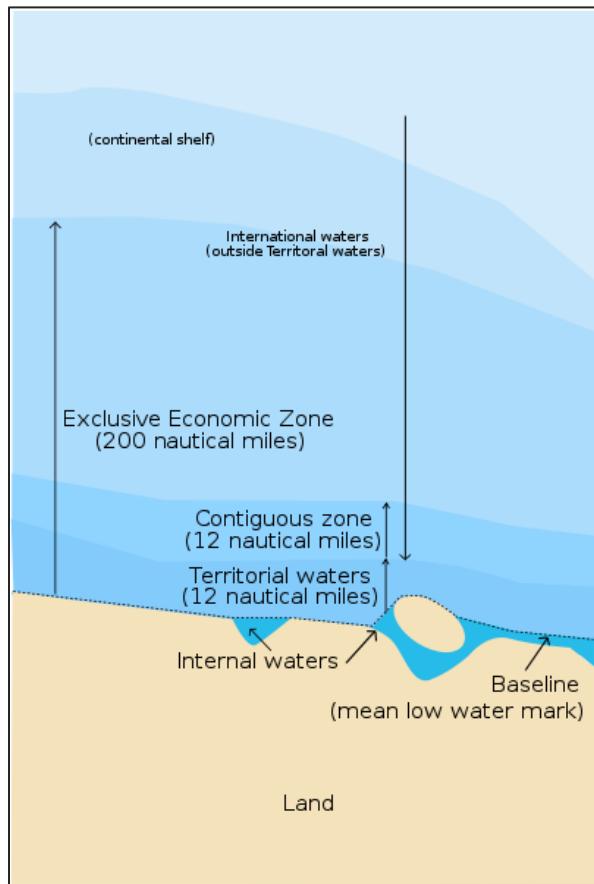


Figure demonstrating maritime jurisdiction over coastal waters.

Pollution Contingency Plan (NCP) of 1968. Only a year later in 1969 the U.S. suffered its first significant offshore oil spill in Santa Barbara, California, when a platform drilling in 188 feet of water suffered a blowout and spewed 200,000 gallons of crude oil into the Santa Barbara Channel. Public concern over water quality grew and the federal government subsequently enacted the National Environmental Policy Act (NEPA).ⁱⁱⁱ In the 1970s numerous studies were published citing the poor water quality of the country's waters fueling further public outrage and spurring the passing of what is now known as the Clean Water Act in 1977.^{iv} In 1989 *Exxon Valdez* spilled between 11 million and 32 million gallons of oil into Alaska's Prince William Sound and as a result Congress passed the Oil Pollution Act of 1990 (OPA).^v

Most recently British Petroleum's *Deepwater Horizon* incident was the catalyst for the disbanding of the Minerals Management Service (MMS), the agency responsible for managing the mineral and energy resources on the Outer Continental shelf, and reorganization of the MMS as three separate and distinct

organizations: the Bureau of Ocean Energy Management (BOEM), the Bureau of Safety and Environmental Enforcement (BSEE) and the Office of Natural Resources Revenue (ONRR). The goal of the reorganization was to establish a system of checks and balances so there was no longer an incentive (money for the organization) to grant oil leases.^{vi}

When new regulations or statutes are enacted, the new statutes preempt older conflicting rules. This includes not only federal regulations but state and local rules as well. The older statutes, to remain relevant, must be amended to coexist with the new regulations.^{vii} Below is an overview and examination of both new and old oil spill prevention and response regulations, an analysis of the requirements these regulations impose upon various governmental agencies and a discussion of how the numerous regulations interact with each other.

This chapter will initially consider important federal regulations and agencies, then discuss significant California state regulations and agencies and follow with a discussion of the international agreements to which the U.S. is bound. It will conclude with an analysis of how the different regulatory and legislative structures interact and cooperate or fail, highlighting the response to the BP *Deepwater Horizon* incident and to a lesser extent the *Cosco Busan* incident in California.

National Regulations and Agencies

The federal statutes and regulations are the overarching structure to which all state and local regulations must conform. The Oil Pollution Act of 1990 is the federal government's current comprehensive statute regarding the federal government and responsible parties' role in oil spill response and cleanup.^{viii} While there were many other regulations concerning oil pollution prior to OPA, OPA amended these statutes and provisions to create a new statutory structure concerning oil pollution and new liabilities for polluters.^{ix} The following highlights the primary federal legislation (pre-OPA to those amended post-OPA) and the agencies involved in prevention of and response to oil spill incidents.

Federal Legislation

National Environmental Policy Act of 1969 (NEPA)

The National Environmental Policy Act of 1969 (NEPA), officially enacted in January of 1970 after the Santa Barbara oil spill, set forth the U.S.'s general policy on the environment. The opening text of NEPA states its purpose is to "declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man..."^x While

NEPA has lofty rhetoric, its only real notable feature involves requiring federal agencies to monitor their impacts on the environment by submitting environmental impact statements (EIS) or environmental assessments (EA) before starting a new project, emphasizing the government's desire to make fully informed decisions about potential projects and their effects on the environment.

Clean Water Act (1972/1977)

Shortly after NEPA was enacted, Congress passed what became known as the Clean Water Act (CWA) (and later amended it four years later). It became the premier governing law in the U.S. concerning water pollution in all navigable waters of the United States and adjoining shorelines.^{xi} The CWA was actually a major reorganization, revision and renaming of the Federal Water Pollution Control Act of 1948.^{xii} The CWA prohibits discharges of oil or hazardous substances, in such quantities as may be harmful (1) into or upon navigable waters of the U.S., adjoining shorelines, or into or upon the waters of the contiguous zone or (2) which may affect natural resources in the U.S. Exclusive Economic Zone (EEZ). The CWA, which is administrated by the Environmental Protection Agency (EPA) requires the preparation and publication of a National Contingency Plan (NCP) providing for “efficient, coordinated, and effective action to minimize damage from oil and hazardous substance discharges, including containment, dispersal, and removal of oil and hazardous substances...”^{xiii} The same section requires designation of a Federal On-Scene Coordinator (OSC) for each area for which an Area Contingency Plan (ACP) (required by OPA, the CWA was subsequently amended to include this provision) is prepared. These areas are established and designated by the President and include an Area Committee (AC), comprised of federal, state and local personnel. The ACs were designed to be a joint task force where state and local officials work together to enhance contingency planning and to pre-plan joint response efforts in order to ensure adequate and streamlined responses to any oil spill in the area.^{xiv} ACPs are required to include a Fish and Wildlife Sensitive Environmental Plan (FWSEP) that addresses fish and wildlife resources, their habitat and other areas considered sensitive environments.^{xv}

Oil Pollution Act of 1990

After the *Exxon Valdez* spill, consensus arose that the patchwork of environmental statutes were ineffective at preventing environmental damage from oil

spill incidents.^{xvi} The Oil Pollution Act of 1990 (OPA) created a three-tiered approach to both prevention and response, first by requiring the federal government to direct all public and private response efforts, second by creating Area Committees, and last by requiring vessel owners/operators to prepare their own facility oil spill response plans and submit these plans to the appropriate government entity: the USCG for vessels, EPA for onshore, non-transportation facilities, USCG and DOT for onshore transportation facilities, and the newly established BSEE (under the Department of the Interior) for offshore facilities (oil/gas extraction). OPA also expanded damages recoverable after an oil spill to include monetary damages for any interim or long-term loss of use of natural resources due to a spill not just the costs required to restore the resources. Further, OPA was revolutionary because it allows for this recovery of solely economic losses after an oil spill without requiring proof of actual harm. Previously a showing of an actual physical harm was previous required. For example, a fisherman can now claim losses for damage to his fishing grounds without having to show any actual affected fish he caught.

OPA expanded provisions designed to prevent spills, requiring all vessels operating in U.S. waters to be double-hulled by 2015 (the *Exxon Valdez* was a single hulled vessel and it is speculated had it been double hulled the amount of oil spilled would have been drastically reduced).^{xvii} The provision had an international effect because it applies to any vessel entering U.S. waters, not just limited to U.S.-flagged vessels. So far, nearly all ships operating in U.S. waters have adopted the double-hull requirement early. The International Maritime Organization and the European Union soon followed with similar double hull requirements.^{xviii}

OPA requires any entity that transports oil or oil-related products in the U.S. to ensure they have adequate response capabilities to respond to a “worst case discharge” spill to the maximum extent possible. Most companies comply with this requirement by becoming members of an association such as the Marine Preservation Association, a consortium of oil-industry related companies which fund the Marine Spill Response Corporation, a nationwide corporation with the equipment and personnel to respond to oil spills.

National Oil and Hazardous Substances Pollution Contingency Plan

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) of 1968, adopted by the U.S. after the massive *Torrey Canyon* spill in the U.K., established the federal government's response in the event of an oil spill or release of hazardous materials into the environment.^{xix} Last revised in 1994, the CWA and OPA both require following the NCP. Currently, NCP requires a response headquarters, a National Response Team (NRT) and Regional Response Teams (RRT). The NRT and the RRTs are primarily involved with planning, policy and coordination, not with directly responding to spills. They are composed of officers of the USGS and the EPA, as well as state representatives.

The NCP requires the Chair of the NRT to be a representative of the EPA and the vice chair a representative of the USCG. During a period of activation because of a response, the chair shall be the agency providing the On-Scene Coordinator (OSC). The EPA is the authority responsible for oil spills that occur in and around inland waters of the U.S., while the USCG is the response authority for spills occurring in coastal waters and deepwater ports.^{xx} Despite this wording, under OPA, the responsible party has primary responsibility for cleanup of an oil spill. The designated OSC is required under the NCP to consult with the natural resource trustee, if one is available, about the appropriate removal action to be taken.^{xxi}

Additional Acts

In addition to the broad acts discussed above, several other federal regulations deal directly or indirectly with pollution from vessels, and many of these regulations specifically codify requirements of OPA and the CWA. The Port and Tanker Safety Act (1978) authorizes the USCG to establish and maintain vessel tracking services in order to control and supervise vessel traffic, ideally preventing vessel collisions.^{xxii} The USCG published the requirements of response plans for vessels and facilities required under OPA in a separate federal regulation.^{xxiii} In 2009, the USCG updated its requirements for oil-spill removal equipment associated with the vessel response plans and marine transportation-related facility response plans.^{xxiv} The Shipboard Oil Pollution Emergency Plans (SOPEP) provides "guidance to masters and officers on board the ship with respect to the steps to be taken when a pollution incident has occurred or is likely to occur."^{xxv} Title 46 Shipping Laws provide a codified series of regulations for all things U.S. shipping,

including personnel standards, inspection requirements, issuance of certificates, etc. The U.S. Act to Prevent Pollution from Ships implemented to codify the requirements of the international convention MARPOL's within the country.^{xxvi} While these acts and statutes are the primary guidelines, they are just a limited overview of regulations concerning the prevention of marine incidents and responsibilities after the occurrence of an incident.

Federal Agencies

As is exemplified by the NCP above, federal agencies are one of the parties responsible for implementing U.S. legislation regarding oil pollution. The two most important agencies in this regard, discussed briefly above, are the Environmental Protection Agency and the U.S. Coast Guard. However, several other agencies also have been delegated some responsibility in regards to prevention of and response to oil spill incidents.

Environmental Protection Agency

The EPA is the lead federal agency in the U.S. tasked with protecting the country's environment. Created by President Richard Nixon in 1970s in the wake of the Love Canal disaster, the agency covers many areas including water. In regards to oil, the EPA is the creator of and enforcer of numerous spill-prevention regulations such as the Facility Response Plan regulation and the spill report regulation. It also is the principal response agency for spills occurring on land or into inland waterways.^{xxvii}

United States Coast Guard

The USCG, while having numerous duties, is the counterpart to the EPA when it comes to oil pollution in navigable waters. While the Coast Guard was not originally tasked with environmental missions, slowly they were added to the list of responsibilities. OPA was the largest legislative expansion of authority of the Coast Guard, creating Coast Guard "Strike Teams" capable of rapid response to oil spills or other disasters.^{xxviii} The authority between the USCG and the EPA over oil and hazardous material is actually shared and the jurisdictions are outlined in a Memoranda of Understanding between the two agencies.^{xxix}

National Oceanic and Atmospheric Administration

Supporting the USCG's efforts is the National Oceanic and Atmospheric Administration, a natural resources trustee under CERCLA (the Superfund Act) and OPA. NOAA's Office of Response and Restoration (OR&R) Emergency Response Division provides scientific support to the On-Scene Coordinator for all oil and hazardous material spills, as required by the NCP.^{xxx} NOAA officials collect data to assess natural resource damage, track oil spills, and provide knowledge of at-risk resources. The OR&R does this through its Damage Assessment, Remediation and Restoration Program (DARRP), which has offices throughout the country and provides permanent expertise to assess injury to natural resources after an oil spill or hazardous substance release. DARRP conducts an assessment of damages after an incident following the Natural Resource Damage Assessment (NRDA) Process. The NRDA process includes a preliminary assessment to determine whether injury to a resource held in public trust has occurred then moves forward with an actual injury assessment and restoration planning phase and finishes off with restoration implementation.

Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, and the Office of Natural Resources Revenue

The Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) was the temporary agency under the Department of the Interior (DOI) after MMS was disbanded. MMS previously had the responsibility for issuing oil and gas leases, ensuring the lease safety provisions were being complied with and collecting lease revenue on the outer continental shelf. As was the plan since its conception, BOEMRE broke up into three distinct agencies to accomplish the above tasks; the Office of Natural Resources Revenue (ONRR) responsible for collecting lease revenue and royalties, the Bureau of Safety and Environmental Enforcement (BSEE), responsible for safety, and the Bureau of Ocean Energy Management (BOEM), responsible for granting leases. The outer continental shelf generally extends from a state's seaward jurisdiction (3 miles from the coast) to the seaward extent of the federal jurisdiction (200 miles out).^{xxxi} OPA prescribed the DOI authority over offshore facilities and associated pipelines. Those safety responsibilities of the DOI will now fall to the BSEE. The BSEE is responsible for enforcing spill prevention measures, reviewing spill response plans, inspecting spill containment and cleanup equipment, reviewing spill financial liability

limits and certifying spill financial responsibility.^{xxxii} BOEM is more involved in the initial process of setting up leases including environmental studies and NEPA analysis.^{xxxiii}

California Regulations and Agencies

Since the Santa Barbara oil spill of 1969, California has been very proactive in its attempts to prevent oil spill incidents as well as to mitigate their effects. While the state must comply with federal regulations that also include state waters, the state is not prevented from enacting its own more stringent legislation in its coastal waters. The most significant oil spill prevention legislation in California, the Lempert-Keene-Seastrand Act of 1990, led to the creation of agencies designed to prevent pollution and assigned other state agencies oversight responsibility in regards to economic development which might pose a risk of pollution. With all these different agencies involved, state legislation has also created a committee for these agencies to work together and communicate with each other, called SIOSC (State Interagency Oil Spill Committee, described below). The following lays out the primary responsibilities of the main agencies.

Office of Spill Prevention and Response (OSPR)

In the state of California, the primary authority to direct removal, abatement, response, containment and cleanup efforts with regard to all aspects of any oil spills within the state's navigable waters belongs to the Administrator of the Office of Spill Prevention and Response (OSPR).^{xxxiv} OSPR is a department within the California Department of Fish and Game (DFG). It is mandated that OSPR comply with OPA and that the Administrator take any action necessary and appropriate to promote the adoption of statutes and regulations required by the federal government. OSPR requires that the owner/operator of a tank vessel or marine facility operating in California must own or have a contract for on-water recovery and storage resources sufficient to respond to all spills up to a calculated amount.^{xxxv} Most companies contract this out by hiring companies such as the Marine Spill Response Corporation (MSRC). Near Los Angeles, MSRC keeps equipment in El Segundo, Terminal Island, the Port of Long Beach, the Port of Los Angeles Harbor, Anaheim Bay and Redondo Beach. OSPR also contains an Enforcement Branch, consisting of licensed DFG wardens who have the authority to enforce both civil and criminal statutes contained in the Lempert-Keene-

Seastrand Act. Additionally, OSPR maintains a legal unit to provide advice to the Administrator and enforce the civil and criminal statutes.

California Coastal Commission

The California Coastal Commission (CCC) plans and regulates the use of water as well as land in the coastal zone, a band of land anywhere from several hundred feet to five miles inland out to the state's three miles offshore jurisdictional limit. Its authority is found primarily in the California Coastal Act of 1976 (CCA) and the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990. The CCC is the designated management agency in California that administers the federal Coastal Zone Management Act (CZMA). The CZMA is a voluntary federal-state partnership that gives the CCC the ability to review all federal activities and federally licensed or permitted activities if the activity affects the coastal resources of California. This includes the important ability to veto federal leasing plans on California's outer continental shelf, an area typically governed by the federal government under the Outer Continental Shelf Lands Act (OCSLA). This has prevented new leasing off California's coast since its enactment.

The CCC maintains an Oil Spill Program with its division of Energy, Ocean Resources and Federal Consistency Division. The CCC has many duties in this program, including reviewing coastal development projects related to energy and oil infrastructure for the compliance with the California Coastal Act and the CZMA, reviewing oil spill prevention and response regulations, providing input on the regulations, reviewing oil spill contingency plans for marine facilities located in the coastal zone and oil spill response plans for facilities located on the outer continental shelf along California, among other things. In regards to an oil spill response, the CCC is responsible for issuing emergency permits for any oil spill cleanup activity that affects the coastal zone.

California State Lands Commission

California State Lands Commission (CSLC) was created in 1938 as an independent body with the authority and responsibility to manage and protect the natural and cultural resources on certain public lands in the state, including the authority to lease these lands for the extraction of oil and gas.^{xxxvi} These public lands

range from submerged land out to the state seaward boundary (three miles) as well as forty lakes and one hundred twenty riverbeds.

The Lempert-Keene-Seastrand Act created the Marine Facilities Division (MFD) of the CSLC. The MFD has statewide marine oil transfer oversight responsibilities at terminals and conducts inspections of these transfer terminals, this includes transfers from ships to land at the ports as well as at the Chevron El Segundo offshore facility. The MFD typically monitors between 40 and 50 percent of all transfers.^{xxxvii}

Also part of the SLC is the Mineral Resources Management Division (MRMD), whose goals are not only to protect California's environment and promote public safety but also to maximize revenue from the 130 oil and gas leases, covering 95,000 acres of California state lands.^{xxxviii} The organization of the MRMD is eerily reminiscent as the now-defunct federal Mineral Management Service. Many faulted the MMS for granting too many leases without performing any due diligence because of MMS's interest in earning revenue.^{xxxix} As the MRMD's website states, oil and gas production is the single largest source of revenue from state owned lands. With the state's current financial crisis, one can only hope the MRMD is not cutting safety corners in order to maximize revenue as well.

State Interagency Oil Spill Committee (SIOSC)

California Government Code requires the Governor to create and maintain a State Interagency Oil Spill Committee (SIOSC). SIOSC is comprised of the Administrator of OSPR as Chairman, chairpersons from the CSLC and CCC, or their designee and representatives from 18 state agencies, including but not limited to, the CA Office of Emergency Services, CA Highway Patrol, CA Department of Fish and Game and CA Office of Environmental Affairs.^{xl} SIOSC is a liaison between federal, state and local agencies and public and private organizations engaged in oil pollution, prevention and control.

United States Coast Guard	Responsible for overseeing the contingency plans of vessel owners and operators and facilities located in federal waters, Federal on-Scene coordinator for any oil spill occurring in federal waters.
US Department of the Interior, Bureau of Safety and Environmental Enforcement	Responsible for the oversight of oil and gas drilling facilities on the outer continental shelf.
US Environmental Protection Agency	Responsible for overseeing the oil spill contingency plans of any facility located on shore. Also is the Federal on-scene coordinator for any oil spill located on land.
Calif. Department of Fish and Game Office of Oil Spill Prevention and Response	Primary state authority on any oil spill within California’s navigable waters, including directing removal, abatement and cleanup efforts. OSPR must work and comply with the on-scene federal agencies, USCG or EPA.
Calif. State Lands Comm. Marine Facilities Div. Mineral Resources Mgmt Div.	SLC possesses the authority and responsibility to manage and protect natural resources on public lands of the state. MFD oversees oil transfers in state waters. MRMD oversees the safety and revenue of oil and gas leases on state lands.

International Agreements

International agreements have played an important role in influencing U.S. oil legislation and vice versa. The U.S. is party to numerous environmental treaties some of which have been executed in the U.S. through federal legislation. The U.S. has influenced international laws such as the banning of single-hull tankers in the E.U. area shortly after OPA banned them in the U.S. Below are some of the more important conventions to which the U.S. is a party beginning with MARPOL, the foremost treaty governing this area of law.

International Convention for Prevention of Pollution from Ships (MARPOL)

Because of the inherent mobility of vessels, international conventions have played an important role in developing standards with which vessels from all nations must comply. The International Maritime Organization (IMO), a specialized body within the United Nations and the primary organization for international regulations concerning shipping, promulgated the International Convention for the Prevention of Pollution from Ships (MARPOL) in 1973.^{xii} Acceptance of Annex I, containing the

provisions concerning oil, and Annex II, concerning noxious liquid substances (NLS) in bulk, were obligatory for all contracting parties while acceptance of the remaining annexes was deemed optional. Annex I and Annex II, both of which came into force in the U.S. in 1987, contain detailed and complex provisions to which vessels must abide. The U.S. has executed Annex I and II through the Act to Prevent Pollution from Ships (APPS).^{xlii} Currently, there are 151 contracting parties to Annex I/II and they cover almost 99% of the world's shipping tonnage as of the end of October 2011.^{xliii} The U.S. has also implemented Annex III concerning Harmful Substances Carried in Package Form, Annex V concerning Garbage and Annex VI concerning Air Pollution. However, the U.S. has not become a party to Annex IV regarding Sewage.

United Nations Convention on the Law of the Sea (UNCLOS)

According to the broad reaching United Nations Convention on the Law of the Sea (UNCLOS), which the U.S. has signed but not ratified (meaning the U.S. is not a full member to the treaty and therefore not bound by its requirements), flag states must adopt pollution regulations for their vessels that “at least have the same effect as that of generally accepted international rules and standards.”^{xliiv} Further, a flag state may exercise jurisdiction of pollution violations of one of its vessels regardless of where the vessel is located. A coastal state may enact any legislation it sees fit in its territorial sea so long as the legislation does not have the effect of hampering innocent passage of foreign flagged vessels.

Intervention on the High Seas in Cases of Oil Pollution Casualties

The Intervention on the High Seas in Cases of Oil Pollution Casualties (the Intervention Convention) was adopted in 1969 after questions of what actions a nation-state was allowed to take in the case of a foreign-flagged vessel polluting on the high seas. The question arose because the vessel *Torrey Canyon* was actually in international waters when it was wrecked and its oil was reaching the coast of the United Kingdom. The U.K. bombed the Liberian-flagged vessel in hopes of setting the oil cargo on fire and thereby reducing pollution.^{xlv} After adoption of the convention, parties may, if they determine there to be a “grave and imminent danger” to the coastline or related interests of their coastline from pollution or threat of pollution of the seas by the oil, take action necessary to prevent, mitigate or eliminate that grave and imminent danger, even going as far as to intentionally sink a ship.

International Convention on Oil Pollution Preparedness, Response, and Co-operation

In July of 1989, after the *Exxon Valdez* spill, the leading industrial nations of the United Nations' International Maritime Organization (IMO) convened and began working on what became the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC).^{xlvi} OPRC is similar to OPA in the U.S. in that it requires parties to establish measures to deal with oil pollution incidents and requires ships and offshore installations to carry onboard oil pollution emergency plans. OPRC requires vessels to report pollution incidents to coastal authorities as well as the vessel's own flag state.

WORKING TOGETHER

The above-mentioned federal, state, local and international regulations, statutes and treaties are just a brief overview of some of the more important and well-known oil spill prevention and response regulations. Numerous more exist, such as the International Convention on Civil Liability for Bunker Oil Pollution Damage or any of the numerous laws under Title 46 Shipping Laws that address smaller, more nuanced issues.^{xlvii} The plethora of rules and regulations often confuse ill-prepared operators at the scene of an accident about which measures to take after a spill and who exactly is in charge of the response and clean-up. For example, is the oil company in charge, or is the U.S. Coast Guard?

Since marine oil spills do not obey jurisdictional borders, numerous parties become involved. Under the CWA and OPA, in any spill involving U.S. coastal waters, the USCG is the lead response agency. Even though OPA is now the overarching national legislation, it does allow for states to enact more stringent laws for their own territorial waters, typically extending three miles out from the coast. Any vessel within a state's territorial waters then must comply with the state's rules and regulations as well as comply with the requirements of OPA. While this should not be a problem for preventative oil spill measures such as the double-hull requirement because both OPA and state laws will mandate this, after an oil spill incident the measures taken can differ or even be repetitious thereby confounding the existing pollution incident. One main point of contention after BP's horrendous Deepwater Horizon oil spill, was the confusion over who exactly was in charge of the cleanup - was it BP, the company who was leasing

the oil rig, or Transocean, the actual owner of the rig, or was the USCG in charge as the spill occurred on the outer continental shelf in federal jurisdiction? The complicated chain of denying responsibility led to confusion and costly delays in the wake of the cleanup of the oil spill. Ultimately, the USCG found BP and Transocean to both be responsible parties.

National Incident Management System (NIMS)

The system to coordinate response efforts in place at the time of the BP Deepwater Horizon spill and still in place today is the National Incident Management System (NIMS) created by an order issued by the Department of Homeland Security (DHS) on March 1, 2004.^{xlviii} NIMS provides a national systematic framework for incident management between federal, state, tribal and local governments, non-governmental organizations and the private sector to respond to all domestic “incidents” in order to facilitate response management. NIMS was actually developed in 1970 in California in the wake of a devastating wildfire but it has since been expanded to be applied to any type of disaster to enable responders at all levels to work together, including any type of oil spill. California Emergency Management Agency (CALEMA) is responsible in California for ensuring the use of NIMS and determining the level of response needed to be in compliance with NIMS in response to any incident, including any oil spill that has the potential to impact the state of California.^{xlix}

Los Angeles Facilities

For most people who live in the Los Angeles area, the thought a major oil spill could occur in their backyard does not frequently cross their minds. But there are major reminders that countywide, Los Angeles is an area highly impacted by the oil and gas industry. Most of these reminders stem from the fact that Los Angeles sits on top of the Wilmington Oil Field, the third largest oil field in the continental United States. From oilrigs disguised as buildings, pipelines crossing the county, vessels unloading oil offshore to the beachfront El Segundo refinery, L.A. has a courtside seat to nearly all aspects of the oil industry.

Wilmington Oil Field

All California state agencies are required to integrate NIMS principles into their response management under the Standardized Emergency Management System (SEMS), directed by then-Governor Schwarzenegger in 2005.ⁱ In regards to oil spills, SEMS provides for a Unified Command Structure, consisting of the USCG, OSPR and the responsible party. The state of California and the USCG have entered into a Memorandum of Agreement (MOA) that formalizes this agreement and the designation of responsibilities and authority at the state and local level in regards to marine oil spill planning and response. This is especially important in the Los Angeles area, as it is home to the third largest oil field in the contiguous U.S., the Wilmington Oil Field.ⁱⁱ

Oil Rigs and Islands

The Wilmington Field extends inland throughout the county as well as offshore into San Pedro Bay. Occidental Long Beach Incorporation (OLBI) a wholly owned subsidiary of Occidental Petroleum, has two different operations in the Wilmington Field, the THUMS Long Beach Company, operator of the four offshore man-made islands in Long Beach Harbor, and the Tidelands Oil Production Company, operator of the onshore portion.ⁱⁱⁱ In California state waters there are three platforms: Esther, Eva and Emmy. These facilities are required by the Lempert-Keene-Seastrand Act to be regularly inspected by the CA State Lands Commission. In federal waters off LA/Orange County there are four oil platforms operated by two different companies, Edith, operated by DCOR LLC (formerly Dos Cuadras Offshore Resources LLC, operator of the well responsible for the Santa Barbara Oil Spill in 1969), and Elly, Ellen and Eureka operated by Beta Operating Company, LLC.^{liii liv} These facilities in federal waters are inspected by the Coast Guard as well as the Bureau of Safety and Environmental Enforcement (BSEE), which inspects drilling equipment and the science behind the removal operation.^{lv}

Chevron El Segundo Marine Terminal

The most visible oil operation in the Los Angeles area is the El Segundo Refinery operated by Chevron Corporation located practically on the beach near Los Angeles International Airport. The refinery operates an offshore marine terminal facility located only one-and-a-half miles offshore in the Santa Monica Bay. The terminal contains two separate berths at which an average of twenty-eight vessels dock per month while pumping oil from the ships under water to the refinery located onshore.^{lvi} In 1980, an

incident occurred at the facility and over 100,000 gallons of oil spilled from a tanker into the Bay.^{lvii} Recently, in December 2010, the California State Lands Commission extended Chevron's lease for this facility for an additional thirty years despite protests over pollution concerns. The size of vessels visiting the berths at the terminal range anywhere from 14,500 to 123,000 deadweight (metric) tons (DWTs) at one berth to 35,000 to 211,000 DWT) at the other.^{lviii}

Ports of Los Angeles and Long Beach

The ports of Los Angeles (POLA) and Long Beach (POLB), located directly adjacent to each other in southern Los Angeles County, are two of the world's busiest seaports. If considered together, the San Pedro complex would be the sixth largest port in the world.^{lix} POLA encompasses 270 berths, with 2,182 vessels calling in the year 2010, while the POLB adds an additional 80 berths to the complex and handled 4,898 vessel calls in 2010.^{lx} The Vessel Traffic Service, VTS, provides commercial vessels calling on either port with vessel traffic information. VTS is a joint public-private operation between the Marine Exchange of Southern California, the State of California, the USCG, the ports of LA and LB and the port tariffs of LA and LB (regulations concerning pilot captain requirements for vessels entering the ports). Pilot captains, individuals licensed to bring vessels into specific ports, are required for most commercial vessels entering the port of LA for safety and security reasons. Pilot captains are more familiar with the port and are required to have a strong understanding of the workings of the tides and currents within the port.

When a vessel calls upon the port, VTS updates the vessel with traffic and other imperative information, such as the location of whales. VTS however does not give directions that must be followed; it simply informs vessel operators of information up to 25 nautical miles from the breakwater.^{lxi} VTS keeps track of all incidents involving vessels within this area of responsibility, from near-misses to loss of propulsion incidents. From January 2011 to October 2011, there were 78 loss of propulsion incidents alone, luckily none of them ending in a collision.^{lxii}

Soon the Port of LA is planning to open an additional potential environmental hazard, a deep-draft marine oil terminal called Pier 400. In addition to the dredging and landfill operations, deepening the channel and building the wharf, which have already been completed, the facility will include tanks capable of holding four million barrels of

oil (sixteen 250 barrel tanks) as well as pipelines to connect the facility to nearby refineries. Pier 400 will be the first oil terminal in Southern California to accommodate VLCC crude oil tankers, which typically have a length of about 1,500 feet. Even the EIS of the Pier 400 project admits that there is a likelihood of a spill from a tanker, even with the double-hull requirements soon to come into effect.^{lxiii}

ANTICIPATED GOVERNMENT RESPONSE TODAY

In any location, the system for response to an oil spill incident is initially the same. Immediately after an incident occurs, the National Response Center (NRC) is notified of a spill. An “incident” for purposes of notifying the NRC includes any discharge of oil that “violate[s] applicable water quality standard; or cause[s] a film or sheen upon or discoloration of the surface of the water...”^{lxiv} The NRC immediately notifies the pre-designated On-Scene Coordinator (OSC) for the region, either a member of the USCG for discharges threatening the coastal zone or a member of the EPA for discharges threatening the inland zone. The OSC makes an initial assessment of the spill and if necessary, notifies the Natural Resources Trustees, typically designated either by the President or Governor of the affected areas. The OSC then determines whether federal assistance is required.

This is where the response for the rigs in state waters and rigs on the outer continental land shelf may differ. Since the oilrigs on the outer continental shelf are in federal water, the federal government must come to their assistance. The OSC will then coordinate the response with the National Response Team and the Regional Response Team. Any spill in waters outside of the state will be monitored by OSPR if California wildlife or habitat may be threatened.^{lxv}

If a marine oil spill occurs at any of the rigs in state waters, including the man-made THUMS islands or the El Segundo Marine Terminal, the USCG is still the lead agency. This is because a spill at any of these locations would directly affect coastal waters and therefore under OPA, USCG is in charge of the response. However, more state and local response would be incorporated into the USCG’s response efforts. Under the MOU with the state of California, the Unified Command Structure would be incorporated into the response effort, which will direct the tactical and strategic response to an oil spill in order to ensure efficient utilization of all resources.^{lxvi}

Recently, California had the chance to see the efficacy of its systems in 2008 when the vessel *Cosco Busan*, a 900-foot container ship, hit the San Francisco Bay Bridge releasing 53,569 gallons of intermediate fuel oil into the San Francisco Bay.^{lxvii} The spill was marked by a breakdown in communication, evidenced by the lack of notification to the National Response Center (over an hour after the allision) and to the local government (several hours after the allision), a violation of the CWA.^{lxviii} Ultimately, the owner of the ship pleaded guilty to a criminal violation of OPA as well as felony obstruction of justice for creating false and forged documents after the crash.^{lxix} The Coast Guard released two incident reports on the spill, which provided over 200 recommendations, many relating to increasing communication between different agencies.^{lxx} Hopefully, after seeing the aftermath of the *BP Horizon* incident, the state of California's oil prevention agencies will implement these recommendations.^{lxxi}

Post-Disaster Government Response Today and Recommendations

In response to environmental catastrophes, the typical government response has been to enact new statutes and regulations designed to prevent similar catastrophes from occurring. It was realized though, that all the complex regulations and legislation did not help to prevent oil spill incidents from occurring or speed the response efforts after an incident because there was no overarching structure designed to coordinate relief efforts. With the implementation of OPA, the federal government hoped to fix this problem. However, numerous problems still exist within the system. This was evidenced by the response to the *BP Deepwater Horizon* incident where there was no real oversight of BP's contingency plan or clarity in who was in charge of the immediate cleanup. The government hopes to have solved this problem at least on the outer continental shelf by restructuring the MMS into three distinct organizations, BOEM, BSEE and ONRR. Whether this restructuring will work and oversight will again be in place for oil wells on the outer continental land shelf is something that will not be revealed until the next incident occurs. Until then, hopefully, the different levels of government will require members of the industry to establish contingency plans, and if an incident does occur, should work together using the principles of the National Incident Management System to conduct a quick, efficient and thorough cleanup of any oil spill.

As with the disbanding of the MMS mentioned above, California's equivalent, the Mineral Resources Management Division (MRMD) of the State Lands Commission should similarly be divided up into distinct agencies. The problem at the federal level of the agency being monetarily compensated for granting oil and gas leases is occurring at the state level here in California. Even more problematic is that this agency is not solely in charge of oil and gas leases on California's navigable waters, but on state owned land as well, an incredibly large area. The safety and security aspects of the MRMD should be removed so that the agency has no incentive to continue to allow oil and gas drilling in risky situations where a spill is likely to occur. Also, the safety and security division should have a separate and distinct responsibility to approve oil spill contingency plans of facilities before allowing drilling so that there is a system of checks and balances, similar to the federal system now in place between the BOEM, the BSEE and the ONRR.

Another recommendation is for the different agencies in California to read the Incident Specific Preparedness Review (ISPR) of the M/V *Cosco Busan* allision with The Bay Bridge to ensure that the recommendations suggested by the Coast Guard have been implemented within their agencies. This includes making sure that there is someone responsible for coordinating communication between the different on-scene entities and effectively conveying the situation to the public. There can be endless memoranda of understandings written but it is necessary that everyone involved know how the memorandums delegate tasks and responsibilities and that the memorandum are followed.

A third recommendation is for facilities oil spill contingency plans to be made public. This is currently not the case. Several attempts were made to reach the Chevron El Segundo facility in order to obtain a copy of their contingency plan; however, each attempt was fruitless. If the plans were widely available, perhaps the public oversight would make oil companies more vigilant about making sure their plans contain correct information and do not show such flagrant lack of caring as the *BP Deepwater Horizon* contingency plan, which stated BP would need to take special care after a spill for sensitive species in the Gulf such as "walruses", seals and sea otters, none of which reside near the warm waters of the Gulf.^{lxxii} Perhaps public oversight and resulting pressure might push companies into preparing oil spill contingency plans for each location before they destroy sensitive ecological areas as well as the economic life of people who reside in the area.

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