

SLAYING THE PAPER TIGER

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ABSTRACT: *California's Oil Spill Response Organization (OSRO) and Plan-Holder Unannounced Drill Programs have provided an opportunity for state, Federal, and industry representatives to work together to ensure that the best achievable response for the State of California is attained. As a result of the success of these two initial programs, the Office of Spill Prevention and Response (OSPR) considers unannounced drills to be the cornerstone of response resource assessment. Unannounced drills present an opportunity to practice and improve how the OSROs and plan-holders (tank vessels, non-tank vessels, and facilities) respond to oil spills by testing contingency plans, reviewing the systems approach, and revealing issues that may hamper an oil spill response. The OSRO unannounced drills test the OSRO's response capabilities for the first six hours of a response, while the plan-holder drills test the owner/operator's ability to initiate a response to a spill incident, based on the owner/operator's contingency plan, for the first three hours of a response. Unannounced OSRO and plan-holder drills both require government agency notification, equipment activation and deployment, and response resources to be operated. Since the only way to evaluate how a plan-holder's team will respond in an emergency is to evaluate them in a non-emergency, adding the element of surprise allows the state to better make the determination as to the adequacy of their preparedness. Non-tank vessel, tank vessel, and facility operators are also required to conduct to plan-holder initiated drills, and these have also been highly successful. Part of the success of these drills is that they have revealed potential problems, for which plan-holder-initiated solutions or OSPR regulatory fixes have been identified and proposed. Through this process, the California Unannounced Drill Program has evolved from being planning standard-based to performance standard-based for OSROs. Under new legislation that reflects the OSRO performance requirements (Government Code 8670.29), plan-holders must now contract with one or more state-rated OSROs to meet contingency plan requirements and an OSRO will only be granted a state rating by participating in unannounced drills.*

Discussion

Since 1990, when the California Oil Spill Prevention and Response Act and the Federal Oil Pollution Act of 1990 (OPA 90) took effect, there has been a dramatic drop in the volume of oil spilled from oil tankers and barges in the United States.

Twelve years have passed since Senate Bill 2040 (SB 2040), the Lempert-Keene-Seastrand Act (Act), was signed into law, OSPR was created, and the Governor appointed an OSPR Administrator. The Act emphasized oil spill prevention, contingency planning, incident response, and made OSPR the lead state agency for these activities. OSPR's mission, supported by the Act, is to protect the environment against the effects of oil

and deleterious materials, and respond to oil and deleterious material spills on the marine waters and inland habitats of California. To support this mission, the Act outlined over 20 regulation packages that needed to be developed by OSPR, such as requirements for contingency plans, financial responsibility, tug escorts (for the five main harbors of the state), administrative and civil compliance actions, procedures to establish Harbor Safety Committees throughout the state, and administration of OSPR's fund accounts. To the greatest extent possible, OSPR has endeavored to be consistent with the scope and intent of the Federal oil spill response regulations promulgated by the U.S. Coast Guard, Environmental Protection Agency, Department of Transportation, and Minerals Management Service.

OSPR's Oil Spill Contingency Plan regulations were adopted in November 1993, and included preliminary requirements for oil spill response training and drills. These original regulations were amended again in June 1998 to further clarify the oil spill response drill requirements, evaluation and credit criteria, and to clearly delineate the Administrator's authority to initiate unannounced drills and test all, or part of, an oil spill contingency plan. Allowances were made to also accept response plans prepared for approval by the U. S. Coast Guard, or other authoritative agency, in lieu of the contingency plan required by OSPR. Under California law, the OSPR Administrator is tasked with ensuring that every marine facility, tank vessel, and non-tank vessel owner or operator prepares a contingency plan in accordance with state requirements for both spill prevention and spill response. These requirements were initially modeled after similar regulations used in the states of Washington and Alaska.

California's vast coastline and inland territory contain more than 7,300 native fish, wildlife, and plant species, of which approximately 300 are listed as either threatened or endangered. The potential for spills resulting from exploration, production, transportation, and other movement of oil continues to keep these species at risk from (in an average year) 543,688,350 barrels of oil transported by vessel, 170,000,000 tons of cargo imported by non-tank vessel, 14, 667 vessel movements (Los Angeles, San Diego and San Francisco only), and 7,500 miles of pipeline that constantly transport oil. Currently, there are 1,223 oil spill contingency plans on file with the OSPR, covering 4,228 non-tank vessels, 1,298 tank vessels, 354 fixed facilities, and 88 mobile transfer facilities. Maintaining these contingency plans to ensure preparedness and response capabilities presents an important and substantial undertaking.

Under SB 2040, the Administrator of OSPR must provide for the Best Achievable Protection (BAP) of coastal resources, marine waters, and inland habitats from the effects of oil and deleterious material spills. To that end, OSPR has developed a comprehensive Drills and Exercises (D & E) Program to carry out its statutory mandate and ensure that every part of the plan-holder's submitted plan meets this BAP. The D & E Program

provides guidance for OSPR staff to interface with participants in scheduled National Preparedness for Response Exercise Program (NPREP) exercises, locally-held industry exercises, and with the Coast Guard on orphan spill exercises.

The Marine Safety Branch, Readiness Unit has developed a database that tracks regulatory compliance and compiles drill histories of all regulated vessels and facilities. Program staff also maintain a calendar of drills and exercises (see OSPR webpage at www.dfg.ca.gov/Ospr/drill_calendar.htm), that shows details, (objectives, etc) to be tested, pertaining to each drill.

One of the major requirements to be met in a California-approved contingency plan is that an owner or operator must identify, and

ensure by contact, or other approved means, the availability of private personnel and equipment necessary to respond to the reasonable worst-case scenario spill. To meet statutory requirements, each response plan must identify the means for accomplishing this task.

The OSRO approval process was developed to facilitate contingency plan preparation and review. Plan-holders must verify their OSRO's capabilities and not rely solely on the approval process. Plan-holders must ensure sufficient amounts of response resources are on-scene in a timely manner. Both the Federal and state governments remind plan-holders "that an OSRO approval/classification does not guarantee the performance of an OSRO, nor does it relieve the plan-holders of their ultimate statutory and regulatory responsibilities to ensure the adequacy of the spill response resources identified in a response plan."

OSRO's are reviewed and approved by OSPR. Both California and the Federal government have programs to evaluate OSRO performance. These evaluation programs are similar in that they are both voluntary, they relieve plan-holders from providing voluminous detailed lists of response resources in their plans, and they both verify records concerning equipment, maintenance, and training. Some major differences are that California now requires the OSRO to meet certain performance standards during unannounced drills, while the Federal government maintains planning standards based on distance from an OSRO to plan-holder location, and average travel times.

State-approved OSROs fall into two different categories: not-for-profit, and for-profit OSROs. Each must have an established contract with a plan-holder to be listed in the plan-holder's oil spill contingency plan. Each must maintain certain levels of equipment and personnel (dedicated solely for oil spill response, containment, and cleanup) that are not used for any other activity that would adversely affect the OSRO's ability to provide oil spill response services. Many OSROs have only dedicated equipment and sub-contractors, while other OSROs rely more heavily on a mixture of dedicated and non-dedicated equipment and sub-contractors. To augment their response capabilities, both types use sub-contractors which may be other approved OSROs or contractors that can provide resources such as storage, people, vacuum trucks, etc., that the OSRO may need to be classified by U.S. Coast Guard (USCG) or approved by California. All approved OSROs are required to conduct training with their sub-contractors to ensure the "systems approach" works. This means that an OSRO must maintain an infrastructure and the resources necessary to mobilize, transport, deploy, sustain, and support the response resources required for the level of response for which the OSRO is approved or will be rated.

Initially, to ensure non-dedicated resources would be available during a response, both California and Federal OPA Agencies thought an OSRO should contract twice as many non-dedicated

resources as actually needed. Thus, if 10,000 barrels a day were skimmed and storage of 20,000 barrels was required (or twice the Estimated Daily Recovery (EDRC)), then 40,000 barrels of non-dedicated storage would need to be contracted. While this looked great on paper, it was never really tested.

Additionally, because California Code of Regulations, Title 14, section 819.02 required that if an entity wanted to apply for consideration as an OSRO, it had to submit an application. Some OSROs would submit voluminous amounts of contracts/Letters of Intent and equipment lists with their OSRO applications to ensure they would receive the necessary approval for their area. OSPR's approval letters to those OSROs then, were based on the OSRO's claims that they had enough equipment in enough locations to meet a plan-holder's needs. However, far too often, these claims were nothing more than "paper tigers." Although this arrangement benefited approved OSROs because (they were able to cover plan-holders at higher planning volumes in different areas of

California), and sub-contractors (because they would be called for an oil spill), it did not guarantee that the equipment would be available.

In this system, non-dedicated equipment (i.e., barges and trained personnel) was a state concern because the OSROs didn't have control of them unless they were actively working a drill or spill. On the other hand, dedicated resources were a concern to OSROs because they sat idle, providing no investment return until they were activated (meaning greater fees charged to plan-holders). As discovered in two OSPR-led unannounced drills, having twice the amount of non-dedicated barges and personnel under contract presented little or no insurance that these response resources would arrive on-scene within the first six hours of a spill response.

Because oil spills can spread rapidly to water, important factors of a good oil spill response include trained personnel, readily available response equipment, the ability to get resources on-scene rapidly, a response plan that provides for source control, and deployment and operation of response resources before the spilled substance can spread. Thus, a well-rehearsed response must take place within the first few hours of an oil spill, and a key factor lies in coordinating the approved OSRO(s) and its sub-contractors. Regular training and communication among OSROs, plan-holders, and sub-contractors will help ensure OSROs and contractors work cooperatively and in unison during an incident.

At the inception of the Contingency Plan regulations nine years ago, plan-holders wanting to find cost-effective ways to meet California's response resource planning requirements and still keep costs down, began looking at OSROs that were similarly qualified, but could be retained at lower costs. The state was concerned because these lower-cost OSROs also held the most sub-contracted, non-dedicated equipment inventories, and an immediate response by them would be less reliable than an immediate response by an OSRO with dedicated resources. When OSROs that held the most local dedicated assets, that conducted the most training, and that charged a higher fee began to lose customers, California started looking for some way to "level the playing field" and ensure those resources, as stated in an OSRO's application, could respond. As a result, the new OSRO rating process (California Code of Regulations, Title 14, section 819) requires that an OSRO agree to inspections, verifications, and participation in drills as a condition of receiving and retaining its rating letter. It also states "...the Administrator may call a drill; conduct an inspection, to validate any or all of a contingency plan. The drills may be announced or unannounced."

In October 1999, OSPR initiated its first unannounced OSRO drill to test the OSRO's ability to deploy its owned and sub-contracted equipment (as now required under the new OSRO rating process). The scenario called for deploying large amounts of response resources (as would be necessary during the first 12 hours of a response), but the OSRO claimed the drill cost was too high, and declined to activate its resources. Accordingly, the OSRO's letter of approval was invalidated for failing to participate in the drill.

In hindsight, to develop an agreed, workable program that included the OSRO perspective, OSPR organized a workshop in cooperation the OSROs, to develop a standard set of objectives and guidelines (OG) for unannounced drills. The State asked the OSROs to voluntarily participate in this program so the State would not have to conduct unannounced drills on 1,200 plan-holders, but instead, would exercise the nine OSROs. Eventually, all OSROs who covered clients in High Volume ports agreed to participate.

The OG was completed on March 3, 2000, and focuses on reasonable worst-case spill (RWCS) volumes, including these specifics:

- Equipment is capable of being deployed at the scene of the spill within the first six hours of notification, and function within one hour of arrival on-scene.
- Personnel arriving on-scene are to be properly trained, have the appropriate HAZWOPER certification, and are knowledgeable in response and equipment operations.
- Government personnel are not to interfere with the OSRO's actions.
- All costs are to be borne by the OSRO (and the plan-holder) except that all state, Federal, and local agency equipment and personnel costs are to be borne by each respective agency.
- Exercise specifics are to include 5,000 feet of boom to be on-scene by the six-hour mark and be ready for deployment and operation within one hour of arrival, 18,750 bbls/ day skimming capacity, and 37,500 barrels of storage.

In May of 2000, OSPR held its first successful unannounced OSRO drill, and after seven months, successfully culminated in November of 2000, with the following results:

- All OSROs that covered plan-holders in High Volume Ports (San Francisco and Los Angeles) had been tested.
- Eight California-approved OSROs were exercised, enabling California to observe activation of 35,300 feet of boom; on-water recovery equipment with a total capacity of 122,625 bbls; storage capacity of 231,654 bbls deployed; and 257 trained personnel.
- Most OSROs were able to deploy their 24-hour on-water recovery and storage resources in under four hours.
- One OSRO that failed to participate in the beginning, performed poorly and eventually went out of business.
- OSRO unannounced drills tested over 98% of the California plan-holders through their OSROs.

With the passage of the non-tank vessel regulations, OSPR initiated another year-long drill program to confirm that vessel operators knew where their contingency plans were located and knew how to conduct required notifications. Beginning in March 2001, this unannounced drill program tested plan-holders ability to make timely notifications and ensure resource deployment in accordance with approved contingency plans during the three

hours immediately following a simulated spill. Plan-holders were tested on their ability to:

- Initiate the necessary notifications within thirty minutes to their Qualified Individual (Q.I.), Oil Spill Response Organization (OSRO), National Response Center (NRC) and the California Office of Emergency Services (OES).
- Deploy water-borne assets, such as adequate boats, personnel, containment boom, storage capacity, and skimming equipment within two to three hours.

OSPR's goals were to:

- Have each OSRO successfully deploy its equipment twice.
- Conduct numerous non-tank vessel notifications at all of California's ports.
- Identify problems in oil spill contingency plans.
- Provide recommendations for the Unannounced Spill Drill Program.
- Give credit to the plan-holders that successfully completed the exercises.

Overall, 48 Plan-Holder Unannounced Drills were conducted (30 notification exercises and 18 notifications with equipment deployments). Of those 48 drills, 40 plan holders were successful at meeting the drill objectives including all seven tank vessel plan holders.

An area of concern revealed by the plan-holder unannounced drills involved in the ability of non-tank vessel owners/operators to make prompt notifications, so the State shifted attention to them. The problem was multi-faceted:

- Not all non-tank vessel operators were using cellular phones while in port.
- Owner/operators sometimes did not reposition satellite phone antennas for in-port operations, while others had to turn satellite phones off for safety reasons.
- Language barriers made communication difficult for OSPR drill representatives and for Qualified Individuals (QI).
- Two notification drill delays were caused by misunderstandings between the operator and the QI.
- Most operators assumed that the QI would make all other notifications for them.

In November 2002, using lessons learned, the OSPR resumed the Plan Holder Unannounced Drill program.

Assembly Bill 715, filed with the Secretary of State on October 12, 2001, confirmed and clarified the OSPR's authority to require OSROs to participate in drills and impose new requirements for OSRO ratings. An "OSRO rating letter" is a document issued by the Office of Spill Prevention and Response to an OSRO following verification, inspection, and satisfactory performance in an unannounced drill, and after the final review of the OSRO's application. California rates the OSRO in only three services that can be effectively measured:

- Containment booming
- On-water recovery (skimming) and storage
- Shoreline protection

The new law also states "the Administrator may require the satisfactory completion of one unannounced drill of each rated OSRO prior to being granted a modified rating, or for renewal, or prior to reinstatement of a revoked or suspended rating." The Administrator may require a rated OSRO to demonstrate that it can deploy the response resources required to meet the applicable provisions of an oil spill contingency plan in which that OSRO is listed. These demonstrations may be achieved by inspections,

announced and unannounced drills, or by any other means, and the demonstrated ability ratings will be valid for three years subject to modification or suspension if a rated OSRO fails to satisfactorily complete a drill. It is critical that OSROs maintain their continued readiness to meet the needs of the plan-holder.

An OSRO's existing letter of approval issued by the Administrator remains valid unless revoked, and will be deemed to meet requirements for three years from the date of the letter's issuance, or until January 1, 2003, whichever date occurs later. OSPR receives a minimal fee for reviewing of OSRO application and rating the OSRO based on the OSRO's satisfactory compliance with criteria established by California Code of Regulations, Title 14, section 819.02. These regulations require the following minimum elements in the OSRO application:

- The geographic region or regions of the state where the OSRO intends to operate.
- Timeframes for having response resources on-scene and deployed.
- The types of equipment that the OSRO will use and the location(s) of the stored equipment.
- The volume of oil that the OSRO is capable of containing and recovering.

Rating levels 0 and 6 require dedicated response resources only. "On-scene" means that the equipment is at the scene of the spill, deployed, and operating.

Under AB 715, a plan-holder must now contract with one or more rated OSROs that will provide dedicated response resources to deploy within the first six hours of a spill or drill. This requirement does not preclude a rated OSRO from bringing in additional non-dedicated response resources.

The use of dedicated response resources for the first six hours means an OSRO will no longer be able to sub-contract for non-dedicated equipment and personnel in areas where it has no control over those resources. The OSRO may have non-dedicated equipment and personnel, but the regulations will ensure that OSRO-owned or controlled response resources will show up within six hours. The use of non-dedicated, non-owned equipment remains essential after six hours. Dedicated equipment for shoreline protection is the only other service that the State will be phasing in to the OSRO rating program and specific amounts of dedicated boom, boats, and people will have to be acquired over a period of years.

The ability to "call a drill for every distinct geographic area" allows the Administrator to validate the information in each OSRO's application and is necessary to "ground truth" an OSRO's spill/drill experience, training, and preparedness.

A plan-holder's cost for conducting an unannounced drill will vary from drill to drill, and will generally increase when equipment is deployed. Plan-holder notification drills cost as little as \$125.00 per drill, while six-hour OSRO equipment deployments ranged as high as \$40,000 per drill. Because many variables figure into the cost, including transfer operations shut-down, calling in off-duty facility personnel, overtime charges, and vessel demurrage costs for missing scheduled sailing times, OSPR made every effort to ensure consistency when initiating and conducting unannounced drills.

California will continue to conduct unannounced drills to ensure OSROs are trained and capable of providing effective responses when necessary. OSROs are obligated to conduct equipment deployment drills and provide training to their personnel under the current OSRO approval program, and these expenses are incorporated into their work plans and budgets.

Some OSROs focused undue attention in their applications to equipment and personnel lists; meeting the letter, rather than the spirit in which the regulations were originally intended. Approvals or classifications were awarded with minimal control of the necessary resources. California OSPR reinvented the OSRO approval program, linking it with unannounced drills and performance standards allowing OSPR to better evaluate the effectiveness of the OSRO competence, state of preparedness, and overall response capability in California.

Conclusions

Over the past three years, the OSPR has made vast improvements to the response posture of California. Early response to a spill is critical to preventing (or mitigating) an on-water spill from having shoreline impact, where damage could be more difficult and expensive to repair. The developments in the unannounced drill program have provided a clearer test of an OSRO's capability to protect California's marine and coastal environment. In effect, these drills have successfully encouraged the OSROs to slay their own paper tigers.

Biography

Mr. Christopher Klumpp has been involved with marine and inland hazardous material spills for over ten years. He served 21 years in the U.S. Coast Guard and is currently the supervisor for the Readiness Unit at California's Department of Fish and Game's, Office of Spill Prevention and Response.