

# OPA 90: ENHANCED BY STATE PREVENTION AND RESPONSE PROGRAMS

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## ABSTRACT

*In the wake of the Exxon Valdez the federal government passed the Oil Pollution Act of 1990 (OPA 90). A number of recent publications have discussed the effects of OPA 90 on the occurrence of unauthorized discharges, but nothing to date has included the additional influence of state regulations in their analysis.*

*To address oil spill response on a state level, agencies such as the Texas General Land Office Oil Spill Prevention and Response Division (TGLO) and the Louisiana Oil Spill Coordinator's Office (LOSCO) were created. Each state, given authority under similar Oil Spill Prevention and Response Legislation, regulates heavily industrialized coastlines. These agencies have developed a level of expertise in management and response to oil spills that complements the federal oil spill response capabilities.*

*This programmatic analysis of two adjacent state agencies will show that the interaction between state government, industry, and the public has a large influence on the effectiveness of OPA 90.*

## OIL POLLUTION ACT OF 1990

### History

The Oil Pollution Act of 1990 (OPA 90) was the first encompassing legislation to stringently address the threat of major oil spills within the United States. Drafted in response to the 1989 *Exxon Valdez* incident in Alaska, OPA 90 defined new standards in oil spill prevention, mitigation, cleanup, and financial responsibility for an industry. OPA 90 also stunned the international petroleum community with stringent vessel structural, operational and manning standards. The core legislation provided an enforceable change in the national mindset and delineated a start of action for appointed government agencies.

OPA 90 first addressed new measures to prevent any condition, situation, or incident that could cause an oil spill. OPA 90 established a double hull requirement for tank vessels carrying oil as cargo entering and operating in United States (U.S.) waters. Standards mandated that all single-hull tank ships and tank barges be replaced or retrofitted with a double hull by the year 2015. The construction of all new tankers greater than 5,000 gross tons must be double hull. To reduce the incidence of oil spills during transfer operations, overfill devices that monitor tank volume levels and provide high level warning are also required.

OPA 90 set out new licensing and certification requirements for vessel crews. New training and standard operating procedures were outlined to ensure mariners were qualified to obtain or renew federal documentation to help reduce oil spills attributed to human error. Additional manning changes included criminal record reviews, limits on the amount of hours worked, and a minimum number of personnel for certain operations. To assist with these new standards, operational and equipment improvements such as communications equipment, pilots, and navigational safety equipment were required to reduce the incidence of human error and vessel casualties.

OPA 90 required owners or operators to take additional preventative measures by developing a facility (FRP) or vessel response plan (VRP). A response plan must detail the capabilities of personnel to respond to an oil spill and document the equipment and procedures necessary during a response. To ensure that personnel were adequately prepared for a spill, response plans must include annual training and drills.

The crux of OPA 90 is civil and criminal enforcement of oil spill cases with owners and operators financially responsible and liable for damages resulting from an oil spill incident. OPA 90 requires that vessel owners carry documentation verifying the ability to pay for the response, damages, and penalties associated with an incident. Financial responsibility follows a tiered penalty system for a vessel based on gross tonnage. Aspects of an oil spill that are covered by financial responsibility include injury or loss of natural, economic and historic resources; response costs, and removal costs.

### Effectiveness to Date

Fifteen years after a nation's eyes were opened to the damaging reality of oil spills, OPA 90 is the focus of an important question—has the legislation been effective? Recent publications have poured through at least 10 years of data and made a few encouraging determinations. Since the initial implementation of OPA 90, the number of major vessel accidents and large oil spills such as the *Exxon Valdez* have decreased. Contrary to similar expectations though, the number of small oil spills recorded has been steadily increasing (Ketkar, 2002).

### STATE LEGISLATION

A large number of coastal states introduced oil spill legislation soon after the implementation of OPA 90. Specific wording within

OPA 90 ensured that the act does not preempt state law. States proceeded to impose a range of levels in liability, similar cleanup and removal actions, fines, and penalties for designated responsible parties. OPA 90 also provided for states to receive reimbursement from the federal Oil Spill Liability Trust Fund to compensate the cost of prevention and cleanup of oil spills. States that developed their own legislation did not cover a number of the aspects of OPA 90 mentioned in the previous section, but built programs to regulate local industry and vessels to compliment and build upon the provisions of OPA 90. Two specific states, Texas and Louisiana, have had effective programs operating since 1991.

**TEXAS AND LOUISIANA**

Texas and Louisiana account for four of the largest petrochemical ports in the U.S. Each state hosts a substantial coastal tourism, shrimping and fishing industry. The potential for a catastrophic oil spill from the *M/V Mega Borg* in the fall of 1990 helped spur both states to evaluate and respond to the threat of an oil spill. In the spring of 1991, both states enacted legislation to address oil spill prevention and response. The Texas Oil Spill Prevention and Response Act of 1991 (OSPRA) and Louisiana Oil Spill Prevention and Response Act of 1991 (LOSPRA) set out the groundwork for two agencies to begin building an invaluable relationship between the designated agencies and industry in their respective communities.

In accordance with OPA 90, each state is mandated to develop both State and Area Contingency Plans that must conform with the National Contingency Plan. The State and Area Contingency Plans delineate the responsibilities of all state and federal agencies including natural resource trustees that are involved during an oil spill.

In similar fashion to the federal Oil Spill Liability Trust Fund, each state has levied a fee on the transfer of crude oil through their states to provide an immediate means of funding for response, mitigation, and damage restoration from oil spills. This fund also provides the monies necessary for the regulatory agencies to maintain and update equipment as necessary, fund prevention programs, and fund grants for education, research and development.

**Prevention**

The Texas General Land Office Oil Spill Prevention and Response Division (TGLO) and the Louisiana Oil Spill Coordinator's Office (LOSCO) in conjunction with the Louisiana Departments of Environmental Quality (DEQ), Natural Resources (DNR) and Wildlife and Fisheries (DWF), have developed regional programs to prevent and reduce the number of oil spills.

TGLO data has found that the incidence of coastal spills fluctuates annually and a large percentage is small volume vessel spills of oily bilge waste and mystery spills (Table 1). Review of the annual spill numbers has shown that the fluctuation is due

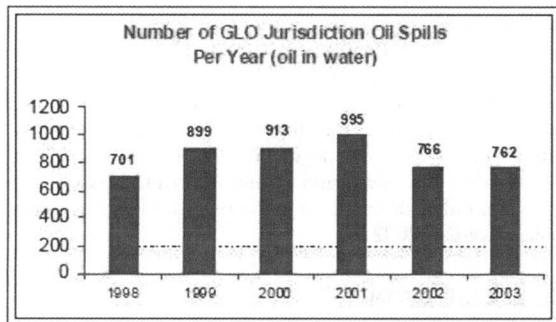
to a number reasons. TGLO has increased efforts in prevention and awareness in the areas of their jurisdiction. First, through increased public education and awareness, the number of spills recognized and reported is greatly improved. To aggressively try and reduce the number of small volume spills, TGLO has also initiated the operation of a number of Oily Bilge Water Reclamation facilities and mobile skid units. The facilities and mobile units target commercial and recreational vessels with the goal of reducing the number of spills by providing a cost-effective means to dispose of oily bilge water. Since the first facility was installed in 1997, the success of the bilge facilities and mobile units has been apparent in sheer volume of oily waste recovered, treated and/or disposed of (Table 2).

**Table 2 Skid Mounted Bilge Unit Location and Amount of Oil Recovered (gallons) 07/04**

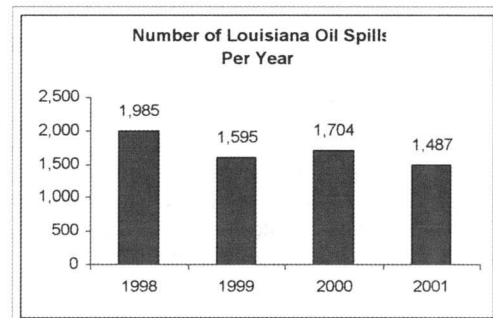
Location	Amount of Oil Recovered
CC Marina	385 gallons
Gulf King/Conn Brown H	722 gallons
JBS Shrimp/Conn Brown H	1074 gallons
Fulton Harbor	243 gallons
Port Aransas Municipal Marina	521 gallons
<b>Totals</b>	<b>2945 gallons</b>

To assist in the reduction of small volume vessel spills, TGLO also performs boat and vehicle patrols of the harbors and marinas where small spills commonly occur. Response officers perform unannounced vessel transfer monitors and vessel plan reviews to ensure that crew and people on board follow proper safety and prevention procedures to minimize the potential for a spill.

The number of oils spills per year for LOSCO also fluctuate annually, but follow a trend similar to spill numbers from Texas (Table 3). LOSCO has seen that a large number of problematic spills originate from abandoned pipelines, barges, and facilities in addition to the spills that occur due to Industry activities every year. To address the spills associated with aging infrastructure, LOSCO developed the Abandoned Barge and Abandoned Facility Programs to identify, assess and eliminate threats. With each program, an extensive survey was conducted to identify vessels, barges, wells, structures, facilities and tank batteries that pose a high-risk threat for oil spills. After an effort is made to identify an owner and/or operator, procedures call for the removal of the identified threat either by the owner/operator, state or federal agencies. Numerous wells have been plugged or abandoned that posed a high-risk threat and the abatement of tank batteries and facilities are proceeding. In addition to the prevention programs



**Table 1 Number of GLO Jurisdiction Oil Spills Per Year (oil in water) (TGLO, 2004)**



**Table 3 Number of Louisiana Oil Spills Per Year (USCG, 2001)**

in place, a number of companies have begun purchasing aging infrastructure resources and are working with LOSCO to make repairs and remove derelict structures. To coincide with the prevention programs, LOSCO has also made a concerted effort to increase agency presence during oil spill incidents. Response to these efforts has been noticeable in the increased awareness of the agency role in spills and improved relationships between Industry, responders and agency representatives.

### Training

TGLO and LOSCO provide detailed training courses for government and industry associated with oil spill prevention and response. The Louisiana Oil Spill Response Management Training Program is a two-day spill management course that details preparation of response personnel with education and response techniques. Courses are held at least once a month to provide an ongoing source for continuing education. TGLO provides different levels of Incident Command System training, environmental workshops and drills to maintain industry awareness levels.

### Outreach

TGLO and LOSCO take an active roll in community education and outreach. Participation in local events, school career days, and public interest group meetings build a personal relationship with companies and communities within the bounds of their jurisdictions. Promoting spill awareness and prevention to children and adults with materials such as pamphlets, coloring books, pens, pencils, and floats all promoting the spill reporting number are invaluable in coastal communities.

To continue to advance and improve the field of oil spill response, the Louisiana Applied and Educational Oil Spill Research & Development Program (OSRADP) funds a number of projects. OSRADP provides a means for research, both in laboratory and field test settings, to perform focused studies with direct applications to oil spill response and protection in Louisiana. OSRADP has awarded more than 85 grants towards projects such as improving GIS data for spill response and the testing of in-situ burns in numerous locations (Davis, 2001).

### CONCLUSION

Implementation of OPA 90 has provided documented reduction in the number of major oil spills and vessel accidents in the past 15 years. Along side this legislation keeping coastal states protected are state agencies such as the TGLO and LOSCO with diligent prevention and response on a local level. Based on this comparison of program activities, further statistical analysis of numbers yet to come may provide a solid addition to this paper.

### BIOGRAPHY

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