

MINORITY REPORT

SUBMITTED BY CAPTAIN MICHAEL MOORE
OIL SPILL ADVISORY COUNCIL (OSAC) MEMBER
TO THE GOVERNOR AND THE LEGISLATURE

I sit on the OSAC on behalf of the Pacific Merchant Shipping Association (PMSA), a regional organization representing interests that include cargo and container ships, tug and barge lines, and marine terminals. Prior to joining the PMSA and its predecessor organization, I served as a U.S. Coast Guard officer for 25 years. My last assignment was that of Captain of the Port for Puget Sound, along with several other associated statutory and regulatory titles and responsibilities. I have extensive experience in marine safety and security programs, and oil spill prevention, preparedness and response along the entire west coast. In addition, I developed and taught an emergency response course for the World Maritime University and earned a Masters in Marine Affairs from University of Washington with a thesis on Oil Spill Response.

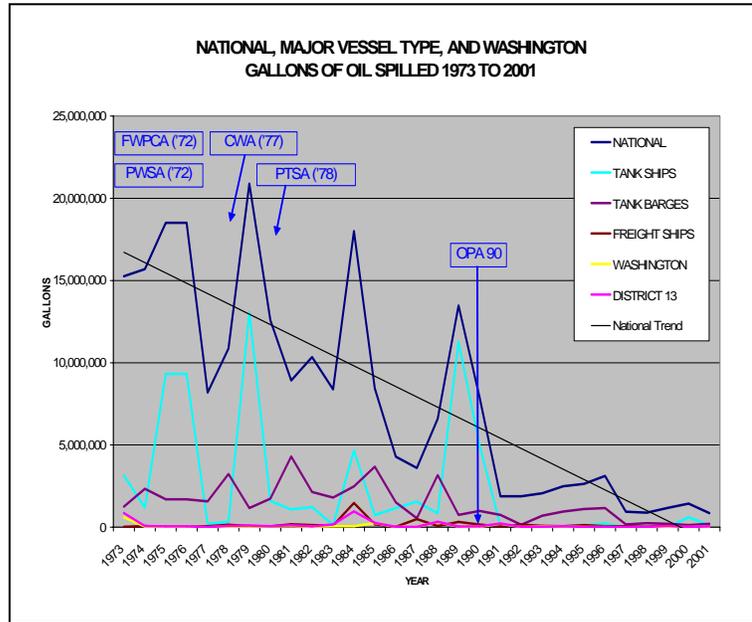
Oil spills have been dramatically reduced (95 % reduction from all vessel sources since 1973; US Coast Guard). However, along with others, we believe there is still room for improvement. There have been significant prevention measures implemented over the past 30 years, some within more recent years and some still to come. Additionally, various international, national and local committees are meeting regularly to further improve applicable standards. When looking at the improvements, one must conclude that standards, legislation, regulatory agency performance and corporate cultures have changed dramatically over the years. We always need to look for areas for improvement, but the track record and trends paint an outstanding and still improving picture with legislative, regulatory and non-regulatory improvements being implemented every year. This is not a complacent or static system.

Cargo shipping interests are committed to fair, risk-based, cost-effective, approaches to spill prevention, preparedness and response. We support a combination of strong, effective regulatory and non-regulatory regimes that include a focus on continuous improvement. This approach has been increasingly and successfully adopted as a best and necessary business practice within the maritime industry through quality control programs focused on safety and environmental management. Consequently, spill trends reflect a great deal of success in our collective efforts.

Cargo shipping has the following key concerns with the OSAC process and report:

- It fails to consider, understand, or analyze the effectiveness of the multiple state, federal, international, and voluntary programs that have resulted in Washington State having the lowest oil spill rates in the nation per available spill data.
- Spill information used is inaccurate and incomplete.
- It creates what may become an adversarial relationship between OSAC and the Department of Ecology (DOE), reducing the effectiveness of both.
- Tug recommendations were not developed with adequate and comprehensive input from all segments of the tug, salvage and shipping industries or with complete analysis of the state of the current tug response system.
- Funding to respond to the serious problem of derelict vessels should have a nexus to the circumstances that create the problem.
- Continued state investment in the OSAC should be made only with clear policy objectives and a rigorous analysis of its value in reducing oil spills.

Reductions in oil spills from commercial shipping over the past three decades are very impressive (major federal laws listed). Please note that spill rates in Washington State and Coast Guard District 13 (which includes both Washington and Oregon) are extremely small compared to the rest of the country. Comparisons with other coastal states demonstrate that Washington oil spills rates, particularly from large commercial vessel activity, are the lowest in the nation and have been for as far back as we can find statistics. We believe OSAC needs to acknowledge these trends and the reasons for them in order to



establish a required baseline of knowledge. Although we have concerns that the DOE data on which Table 17 of the Report is based has not been fully validated and is missing some categories, it shows that spill volumes from large commercial vessels are negligible relative to other sources. The OSAC needs to understand and support those actions that led to these reductions. Unfortunately, the OSAC thus far has not included sufficient review to do so. We believe this is a significant shortfall in the OSAC process thus far.

This minority report summarize areas of agreement and calls attention to our concerns regarding process, data and other factors related to the recommendations and future work plan intentions of OSAC. It is offered to assist the Governor and the Legislature in developing sound public policy.

Council Process

The OSAC spent little time discussing the current state of prevention, preparedness and response programs, so membership was left primarily with partial and sometimes inaccurate information from the consultant and staff put before them in several draft stages. An adequate review of international and Coast Guard programs was not included in the consultant’s scope of work, though we recommended it be included. Instead, summaries of some other prevention programs were provided to include such areas as Norway, Shetland Islands and a largely defunct program in the State of Maine.

Basic Critical Information Not Considered: Information which I provided to the consultant on existing prevention regimes, spill trends, as well as corrections to some obvious errors, for the most part have not been incorporated or referenced in the report. The Prevention Program Comparison Matrix – Appendix A, is partial and misleading in its representation of international and Federal programs, suggesting that no program requirements exist where they most definitely do. I have provided in Attachment 1 a brief discussion on a partial list of international and Federal programs as a way to convey the volume of significant information that was not considered. These programs include very comprehensive sets of requirements covering

design, construction, operation, maintenance and inspections of major commercial vessels. There are also requirements regarding navigation safety, such as traffic separation schemes and rules of the road, vessel traffic services, etc. To ignore such critical information will naturally lead to incomplete and misleading assumption and conclusions.

Department of Ecology vs OSAC: The review of the Department of Ecology programs was insufficient to determine or make comment on whether existing resources were optimized by prioritization and in coordination with the Coast Guard. We have a fundamental disagreement on a process that seeks funding before reviewing and commenting on present programs and funding - this is out of sequence. Furthermore, we recommend a review of the OSAC relationship with DOE to develop a more synergistic relationship if we are to explore and identify improvements or validate and support existing programs (we understand the final report will contain revised comments towards DOE). Our concern during the creation of the OSAC process was that it would create unhealthy competition between the two organizations such that objective review and productive discussions surrounding performance, priorities and focus would be minimized. We believe this continues to be a valid concern. DOE and industry have worked hard to enhance productive communications focused on risk and facts – though we don't always agree, DOE has developed an increasingly open dialogue between all parties to explore the issues, thus incorporating the expertise and knowledge not previously considered. This cooperative process enhances decision making and contributes to improving what is an already excellent marine safety system with oil spill rates that lead the nation if not the world

Washington Sea Grant Program: Without having any kind of program brief or discussion, and apparently without any research, the Council report came to the recommendation that the responsibilities of this program be transferred to the OSAC. During the report submission delay period, OSAC met again to clarify some revenue projections and recommendations and additionally decided to postpone any recommendation regarding the UW Sea Grant program until the November 2006 meeting. The postponement was due to information submitted by stakeholders involved with the UW program. This illustrates a failure to conduct adequately research to understand issues before reaching conclusions.

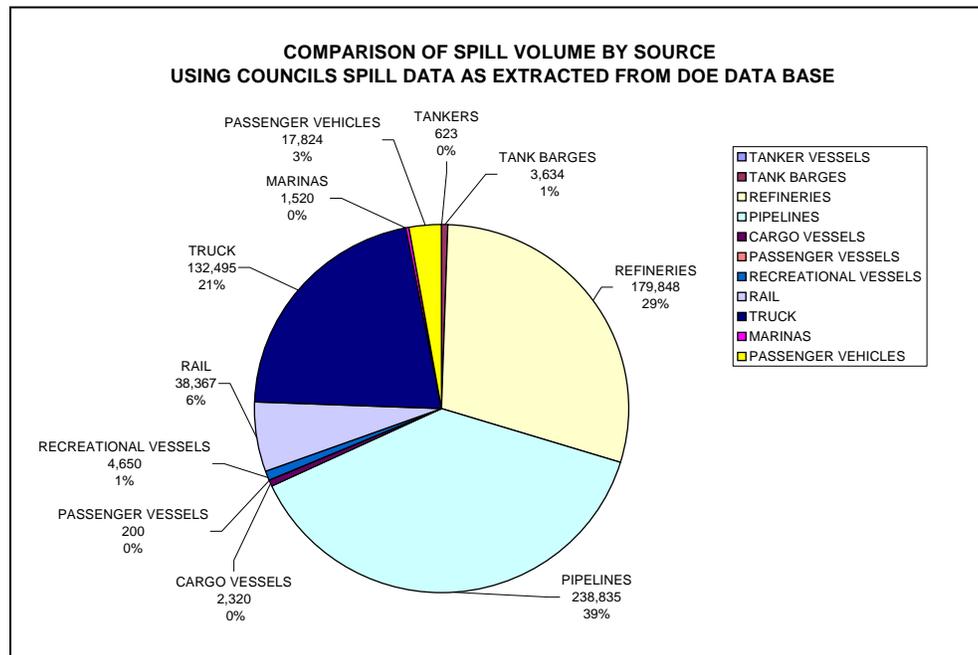
Report Timeline and Delay: The rush to get a report in by the deadline, with much data still not verified or available continues to impact the process and can lead to false conclusions and a less than optimal tool upon which public policy may be based. Although the report submission was eventually delayed, this minority report is being written based on a final draft report which we understand is still under edit. It is worth noting that the delay was apparently due to confusion by council members as to what they voted for and due to a revising of the revenue sources and projections.

Spill Data

Oil spill volumes have been dramatically declining nationally for the past 30 plus years. This includes states with minimal or no prevention programs as well as states with extensive prevention programs similar to Washington. Our state continues to have the lowest oil spill rates in the nation based on several measures and has had that distinction for a very long time. Cargo vessels have produced virtually no spills while underway transiting in and out of our ports, an enviable record. The absence from this report of a robust analysis of spill trends and the reasons for those trends leaves decision-makers with an incomplete and misleading picture on which to

make fully informed public policy decisions. The cargo industry is committed to continuous improvement in spill prevention and response, but improvement recommendations should be fully justified using all relevant and available information.

Oil Spill Data used by OSAC: The risk table in the report is based on spill information from DOE and, in our review, we have noted some obvious errors. Although we recommended that this data be validated, reconciled with U.S. Coast Guard spill data, and include all spill sources prior to incorporation into the final report, this was not accomplished, in part because of the process was rushed. This data does not include spills from fishing vessels, derelict vessels, or from marine oil transfer facilities except those that are refineries. It also incorrectly counts a barge spill (the oil barge transfer spill that led to the recent transfer legislation) as a facility spill. And, it initially included a major spill on the central Oregon coast as a Washington spill (consultant has since pushed that to a footnote but it is misleading). Nevertheless, council members stated that the preliminary data presented by the consultant at least presented a picture of the issue. This pie chart below displays that picture showing the volume of spilled oil by the categories listed – again, it needs to include all sources and be reconciled with Coast Guard data. Nonetheless, note that spill volumes from large commercial vessels are relatively very small and they would be smaller yet if all spill sources and volumes were included. This should be welcome information for those concerned about commercial shipping and related spills.



Most Probable Worst Case Discharge: The risk table provided by the consultant also includes most probable worst case discharge volumes for various source types. We fully agree with looking at risk but add that it must be done in a comprehensive and consistent manner. We asked for the assumptions relating to these numbers and were referred to DOE who was unable to provide them. Without any attribution to the accuracy and integrity of the data, any conclusions drawn will be inherently questionable. For example the amount listed as a most probable worst case discharge for a dry cargo vessel spill exceeds the amount carried by most cargo vessels whereas the volumes listed for tankers and tank barges represent something less

than half of their carrying capacity. This illustrates the lack of consistent assumptions and comparisons in this table.

Estimated Spill Costs: The risk table uses spills and most probable worst cases to project out some costs by running numbers through an EPA model. We recommended that OSAC refer to *existing State of Washington data* on spills over 25 gallons over the past 15 years, each of which required damage assessment assignment and collection. We note that this information is based on well vetted data given the penalty processes involved. The data we were provided by the State of Washington covers from June 1992 through March 2005. We further note that cargo vessels were involved in approximately 3% of the spills and spill volumes of these cases. Tank ships and barges were involved in 5% to 6% of the spills and spill volume. This data is statistically significant and points to a need to put commercial maritime activity in proper context as it relates to oil spills. This will help ensure that appropriate attention is being paid to determining why the rates are low, what appropriate improvements can be made and what is being done with other spill sources that make up more than 90% of the spills and spill volumes in this data.

Gap Analysis

The push for a gap analysis by OSAC is based in large part on a presumption that gaps were created with court decisions or by agency actions or inactions. We reiterate the need to fully understand the existing regulatory and non-regulatory regimes. We know this is a sensitive issue, particularly in Washington State, but believe due diligence requires us to note that with its call for a "gap analysis," the Council improperly suggests that Washington taxpayers fund a comprehensive legal analysis of the international and Federal regulatory structure and determine ways to thwart the clear pronouncements of the U.S. Supreme Court in *U.S. v. Locke*, 529 U.S. 89 (2000) ("the Intertanko decision"). The Supreme Court's whole point was that Congress and the Coast Guard had "occupied the field" and that there was no room left for state regulation in the specific areas identified. The Supreme Court also made it clear that while the State may participate in the process, it is not the state's role to evaluate the sufficiency of the Federal regulatory regime and then "fill the gaps" as it deems appropriate: "The issue is not adequate regulation but political responsibility; and it is, in large measure, for Congress and the Coast Guard to confront whether their regulatory scheme, which demands a high degree of uniformity, is adequate."

Comments on Specific Aspects of the Base Report

State-of-the-Art: Note that the list of elements the Council finds should be part of a State-of-the-Art prevention system are all elements that are to varying degrees part of the existing System. Some are well established, others are in progress. This is a pretty good indication that we already have an outstanding and still improving State-of-the-Art system. This conclusion is also supported by the significant decline in spills and spill volumes here in Washington and around the country.

Subcommittee and Technical Advisory Committees

Lessons Learned Subcommittee: This subcommittee considered a very narrow slice of accident data, failing to look at all the extensive Coast Guard marine casualty data base and the

resulting corrective actions taken over decades or currently in progress. The Coast Guard's casualty investigations have not only been the foundation of many regulatory and legislative changes, they have also lead to innovative non-regulatory programs, such as the Prevention Through People (PTP) Program, that have had significant positive impact on the safety culture within the marine industry. Instead of working independently on these matters, this should be something for DOE to be working on with the Coast Guard.

Derelict Vessel TAC: We strongly support the cleaning up of derelict vessels to mitigate the threats and pollution they cause and to save state and federal resources. I have personally pushed for stronger derelict vessel mitigation programs for many years including efforts in Washington State. We support OSAC calling additional attention to this problem. We believe funding sources and legislation for this program ought to have a nexus to the issue and work to minimize the number and rate of vessels that become derelict. The references to "formerly commercial vessels" is primarily a reference to smaller commercial vessels like older fishing vessels, tugs, and workboats and should be differentiated from large deep draft vessels like tankers, container vessels and bulkers that do not contribute to the derelict vessel problem. The smaller vessels, in addition to derelict recreational vessels, become a threat primarily when they are removed from commercial service by the owner and/or purchased for private use by those that can't or won't maintain them. We urge policies and funding more directly tied to this problem. We support a properly funded state program that maximizes the use of available federal funding via effective partnership with the Coast Guard and that discourages vessels owners from allowing vessels to become derelict.

Tug Technical Advisory Committee (TAC): The Tug TAC and ultimately the Council recommends that the tug at Neah Bay be funded year round. We are not in disagreement with the concepts and value of emergency assist capability. In fact, Coast Guard control requirements on vessels experiencing propulsion problems often result in the use of tugs to mitigate risk. We have also been strong supporters of the International Tug of Opportunity (ITOS) system of tugs which is now enhanced by the mandatory automated identification system requirements which tracks more tugs over a larger area. Further, we would like to see the OPA 90 salvage and firefighting rulemaking completed and we have so commented. These rules will in part require tug response timelines for areas that include the Washington coast, Strait of Juan de Fuca, Puget Sound and the Columbia River. However, the process in the Tug TAC lacked the appropriate assessment of these and other technical issues sufficient to justify their entire set of recommendations.

Federal Funding TAC: The proposal to commission and fund a study presumes that the TAC plus some consultant work will identify, review and assess effectiveness and funding of federal programs. This work plan sounds very similar to what GAO, the Coast Guard and Congress do on a continuous basis. Briefs from the Coast Guard, existing reports and testimony are available and should be used. Additionally, the assessment of the implementation of the Memorandum of Agreement (MOA) between the State of Washington and the Coast Guard has not been done nor have the two agencies been asked to provide a brief on this. See gap analysis comments above.

Spill Response Capacity TAC: Verifying sufficiency of spill response capacity is important, however, this is already a charge to DOE on behalf of the state and as such

complements similar federal efforts. DOE is currently engaged in a fully participatory rulemaking to establish the response equipment requirements for spill response plan holders and primary response contractors. An advisory committee process was used, in which many of the OSAC members or organizations they represent fully participated. The suggestion here is that DOE has done less than an adequate job and an independent and duplicative process is necessary. Even though I chaired this TAC in the development of a scope of work, something that I could support if need be, we suggest that DOE, not OSAC, administer any additional study as part of its responsibilities and that the effort be coordinated with the Coast Guard, the Northwest Area Committee and equipment providers since they collectively have data and plans and are engaged in review and testing efforts regarding response capabilities.

Council Operations and Funding: The OSAC work plan needs to be further evaluated in light of the critical need to first understand the existing system. We believe OSAC should avoid duplicating DOE efforts and should instead consider focusing on individual programs of interest in concert with DOE. Consequently, conclusions in terms of funding are premature.

Long Term, Sustainable Funding for the Washington State Oil Spill Prevention Program: We requested an assessment of the implementation of the MOA between the State of Washington and the U.S. Coast Guard that seeks to avoid duplication and make best use of resources. This was not provided. As stated previously, OSAC did not fully assess program effectiveness in the Ecology Spills Program or the agency's resource prioritization decisions. We believe a full assessment of Ecology programs and the implementation status of the MOA with the CG is necessary before recommending additional programs and/or funding.

Funding Options: As stated previously, OSAC did not comprehensively review the existing programs, thereby making it difficult to identify improvements and justify funding requests. First, use of existing funding streams must be evaluated to determine whether they are being efficiently and effectively used. That was not done and thus, for example, the OSAC is unable to endorse DOE's budget request. If additional funding options are deemed necessary, they should be risk based in nature.

Conclusions & Recommendations

This report highlights some of our concerns regarding the process, report, recommendations, future work, funding and role of OSAC particularly as it relates to existing state programs and agencies and have concluded that remedies are necessary. As a result, we outline a few of many steps that should be considered:

1. Section 1(4)(g) of the enabling legislation states the purpose of the statute is to "provide for an independent oil spill advisory council to review on an ongoing basis the adequacy of oil spill prevention, preparedness, and response activities in this state." It is hard to conclude something is inadequate if you have not analyzed it in detail, and made findings that changes are necessary. OSAC needs to learn and understand the entire system or it is not performing its duties consistent with the legislative intent.
2. Section 3(5) of the enabling legislation states that "[b]y September 1st of each year, the council shall make recommendations for the continuing improvement of the state's oil spill

prevention, preparedness, and response activities through a report to the governor, the director, and the appropriate committees of the senate and house of representatives." Again, to make recommendations for improvement, it is first necessary to assess the adequacy of current programs, make findings such programs are not adequate, and then devise specific programs that will address such inadequacies. The OSAC needs to first understand existing activities in the state which would include federal, state, industry and non-regulatory efforts. This has not been done and needs to be in order to be consistent with the legislative intent. The efforts should also include a review and understanding of validated, categorized oil spill and incident data as indicators of successes or inadequacies.

3. Evaluate the accuracy, effectiveness, and long-term need of a separate OSAC. We do not believe it is necessary to have separate and independent oversight committees reviewing actions of each state agency and program in perpetuity. Perhaps a modification of the relationship between OSAC and DOE could lead to a more cooperative and productive process better fulfilling the intent of the legislation.

Submitted by

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Member, Oil Spill Advisory Council

Attachments:

1. International and National Prevention Programs
2. Graphic display of excerpts from the CG spill compendium, spill history 1973 to 2001

ATTACHMENT 1 – INTERNATIONAL AND NATIONAL PREVENTION REGIME

This is a very brief discussions regarding what are otherwise very comprehensive safety and pollution prevention standards at both the international and national level. Every major commercial vessel operating in the United States, whether U.S. flag or foreign flag, is subject to these standards. I welcome the opportunity to expand on these discussions for those who are interested.

1. **International Prevention Regime:**

- a. **International Maritime Organization (IMO):** Because of the international nature of the shipping industry, it has long been recognized that action to improve safety in maritime operations would be more effective if carried out at an international level rather than by individual countries acting unilaterally and without coordinating with others. In order to achieve its objectives, IMO has, in the last 30 years, promoted the adoption of some 30 conventions and protocols and adopted well over 700 codes and recommendations concerning maritime safety, the prevention of pollution and related matters.
- b. **Safety of Life at Sea (SOLAS) Convention:**
 - (1) The first conference organized by IMO in 1960 was, appropriately enough, concerned with safety. That conference adopted the International Convention on Safety of Life at Sea (SOLAS), which came into force in 1965, replacing a version adopted in 1948. The 1960 SOLAS Convention covered a wide range of measures designed to improve the safety of shipping. They included subdivision and stability; machinery and electrical installations; fire protection, detection and extinction; lifesaving appliances; radiotelegraphy and radiotelephone; the safety of navigation; the carriage of grain; the carriage of dangerous goods; and nuclear ships.
 - (2) In 1974, IMO convened a conference to adopt a new International Convention for SOLAS with some significant improvements in not only the requirements but also the process for putting amendments into force on a predetermined date. Since entering into force in 1980, this SOLAS Convention has been modified on numerous occasions.
- c. **Standards for Training, Certification and Watchkeeping (STCW):** The safety of life at sea, the marine environment and over 80% of the world's trade depends on the professionalism and competence of seafarers. The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 1978 was the first internationally-agreed Convention to address the issue of minimum standards of competence for seafarers. It established basic requirements on training, certification and watchkeeping for seafarers on an international level. Previously the standards of training, certification and watchkeeping of ships personnel were established by individual governments, usually without reference to practices in other countries. As a result, standards and procedures varied widely, even though shipping is the most international of all industries. In 1995, the STCW Convention was completely revised and updated to clarify the standards of competence required and

provide effective mechanisms for enforcement of its provisions. STCW 95, as it is referred to, entered into force in 1997.

d. Prevention of Pollution from Ships (MARPOL):

- (1) The 1954 Oil Pollution Convention was the first major convention designed to curb the impact of oil pollution. But in the years that followed, the pollution threat increased dramatically and, since coming into existence, IMO has devoted increasing attention to the problem of marine pollution. The 1954 Convention was amended in 1962. Following the TORREY CANYON disaster in 1967, IMO produced a series of conventions and other instruments, including further amendments to the 1954 Convention which were adopted in 1969.
- (2) In 1969, two conventions were adopted. One was the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, which established the right of coastal States to intervene in incidents on the high seas which are likely to result in oil pollution. The second was the International Convention on Civil Liability for Oil Pollution Damage, which deals with the civil liability of the owner of a ship or cargo for damage suffered as a result of an oil pollution incident. The Convention is intended to ensure that adequate compensation will be readily available to victims of pollution, and places the obligation for paying such compensation on the ship owner.
- (3) Some Governments felt that the liability limits established by this system were too low, and that the compensation made available could, in some cases, prove to be inadequate. As a result, another conference was convened by IMO in 1971 which adopted the Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage. Unlike the Civil Liability Convention, which puts the onus on the ship owner, the IOPC Fund is designed to provide additional compensation to victims where an accident results in pollution damage which exceeds the compensation available under the Civil Liability Convention. Thus the burden of compensation is spread evenly between ship owners and cargo interests. The Fund is operated by an International Oil Pollution Compensation Fund Organization, which has its headquarters in London. The limits of liability in the 1969 Civil Liability and 1971 Fund Conventions were increased in protocols to amend them which were adopted by a conference convened by IMO in 1984.
- (4) In 1973, IMO convened a major conference to discuss the whole problem of marine pollution from ships. It resulted in the adoption of the first ever comprehensive anti-pollution convention, the International Convention for the Prevention of Pollution from Ships (MARPOL). The Convention deals not only with pollution by oil, but also pollution from chemicals, other harmful substances, garbage and sewage. The MARPOL Convention greatly reduces the amount of oil which can be discharged into the sea by ships. The Conference on Tanker Safety and Pollution Prevention (TSPP) in 1978 adopted a Protocol to the 1973 MARPOL Convention which introduced further measures, including requirements for such operational techniques as crude oil washing (a development of the earlier "load on top" system) and a number of modified design and construction requirements such as protectively located

segregated ballast tanks. The Protocol of 1978 relating to the 1973 MARPOL Convention in effect absorbs the parent Convention with modifications. This combined instrument is commonly referred to as MARPOL 73/78. It entered into force in October 1983. The Convention has been amended on several occasions since then.

- d. **International Safety Management (ISM) Code:** Since the 1980s, IMO has increasingly addressed the people involved in shipping in its work. In 1989, IMO adopted *Guidelines on management for the safe operation of ships and for pollution prevention* - the forerunner of what became the International Safety Management (ISM) Code which was made mandatory through the International Convention for the Safety of Life at Sea, 1974 (SOLAS). The ISM Code is intended to improve the safety of international shipping and to reduce pollution from ships by impacting on the way shipping companies are managed and operated. The ISM Code establishes an international standard for the safe management and operation of ships and for the implementation of a safety management system (SMS). Effective implementation of the ISM Code led to a move away from a culture of "unthinking" compliance with external rules towards a culture of "thinking" self-regulation of safety - the development of a 'safety culture'. The safety culture involves moving to a culture of self regulation, with every individual - from the top to the bottom - feeling responsible for actions taken to improve safety and performance.
- e. **Regulations for Preventing Collisions at Sea (COLREGS):** Among the most common causes of accidents at sea are collisions. Regulations for preventing collisions that were adopted by the 1960 traffic separation schemes (TSS) have helped to reduce the number of collisions in many parts of the world. The TSS for the Strait of Juan de Fuca was adopted in 1981 and implemented in 1982. The TSS for approaches to Puget Sound and approaches was adopted in 1992 and implemented in 1993. Revisions to these TSS's and the addition of a TSS for Haro Strait and Boundary Pass were adopted and implemented in 2002. The latter revisions were the direct result of Port Access Route Study in which the community was invited to participate. In 1972, IMO adopted new International Regulations for Preventing Collisions at Sea (COLREG). These include a number of new features including a provision which made traffic separation schemes adopted by IMO mandatory. Traffic separation schemes have been introduced throughout the world where maritime traffic has been particularly congested.

2. **Federal Prevention Regime:**

- a. **Domestic Vessel Inspection Programs:** The Coast Guard administers navigation and vessel inspection laws and rules, and regulations governing marine safety. The Coast Guard is tasked with inspecting the vessels to which those laws apply. Application of statutes to a particular vessel is based upon many factors, including: trade, route, length, tonnage, and/or number of passengers. Most statutes establish general requirements for inspection and authorize the Coast Guard to prescribe specific standards by regulation. Certain requirements for vessel standards and procedures are contained within the statute itself. Regulations in Title 46 address design, construction, maintenance, repair, operation, and inspection applicable to the following vessel types: tank vessels, passenger vessels, cargo and miscellaneous vessels, small passenger vessels, research vessels, and mobile offshore units.
- b. **Foreign Vessel Inspection Programs:** Foreign vessels operating in U.S. waters are subject to inspection under Title 46 United States Code (U.S.C.) Chapter 33. Reciprocity is accorded to vessels of countries that are parties to the International Convention for the Safety of Life at Sea (SOLAS) (46 U.S.C. 3303(a)). In addition, certain provisions of the pollution prevention and navigation safety regulations (33 Code of Federal Regulations (CFR) 154-156 and 164, respectively) apply to foreign vessels operating in U.S. waters. The extent of application of these laws and regulations has been modified in many cases by international conventions.
 - (1) **Port State Control (PSC)** is the process by which a nation exercises its authority over foreign vessels when those vessels are in waters subject to its jurisdiction. This authority is derived from several sources both domestic and international. A nation may enact its own laws and regulations imposing requirements on foreign vessels trading in its waters (i.e. the double hull requirements imposed under the Oil Pollution Act of 1990 (OPA 90), or the navigation safety regulations found in 33 CFR part 164). In addition, nations which are party to certain international conventions (i.e. SOLAS, International Convention on Load Lines 1966 (ICLL); International Convention for the Prevention of Pollution from Ships 73/78 (MARPOL); the International Convention on Standards of Training Certification and Watchkeeping for Seafarers, 1978, as amended in 1995 (STCW 95); and International Labor Organization Convention No. 147, The Convention Concerning Minimum Standards in Merchant Ships (ILO 147)) are empowered to verify that vessels of other nations operating within their waters comply with these conventions, and to take action to bring these ships into compliance if they do not. The U.S. exercises its port state control authority through the U.S. Coast Guard's long standing foreign vessel boarding program, now referred to as the Port State Control Program.
 - (2) Through its PSC Program, the Coast Guard boardings are focused on those vessels most likely to be substandard based on identified risk factors. When vessels that are not in substantial compliance with applicable laws or regulations are identified, the Coast Guard imposes controls to ensure they are brought into compliance. The program goal is to identify and eliminate substandard ships from U.S. waters.

- c. **Training, Qualifications, and Certification:** The Coast Guard establishes the training and qualifications required of U.S. merchant mariners. Some of the more recent requirements are based on international conventions to which the U.S. is signatory. The Coast Guard also establishes the minimum manning requirements for U.S. flag commercial vessels.
- (1) **Regulation of Manning Standards And Crew Qualification:** COIs contain provisions for the required minimal manning of an inspected vessel. Certain laws require the presence of licensed officers and certificated seamen of certain qualifications on various types of vessels. The varying levels of crew qualification are addressed in a large variety of federal regulations. Vessel personnel qualifications fall into two major categories:
 - (a) Licensed Officers. These include masters, mates, engineers, pilots, staff, and radio officers. Licensed officers who satisfy the various experience, physical, and testing requirements of the regulations are issued licenses that are renewed at 5 year intervals.
 - (b) Unlicensed Personnel. These include able seamen (AB), ordinary seamen, qualified members of the engineering department (QMED's), wipers, stewards, lifeboatmen, and tankermen. These personnel are issued Merchant Mariner's Documents (MMDs).
 - (2) **Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, as amended in 1995:** Title 46 CFR Part 10 is designed to closely conform to the provisions of STCW. The Convention was signed in June 1991 and went into effect for the United States in October 1991. The convention requires the issuance of certificates of competency to seafarers on board seagoing ships exclusive of public vessels, fishing vessels, pleasure yachts, and wooden ships of primitive build.
 - (3) **Prevention Through People:** Recognizing that eighty-five percent of all maritime casualties are personnel related, the Coast Guard developed the concept of Prevention through People (PTP) to focus on the human element in reducing casualties and pollution. PTP stresses safe and profitable operations based on a balanced interaction between management, work environment, technology, and human behavior backed by a solid foundation of rules, regulations, and Standards. As part of the PTP implementation, the skills that mariners need and the best means of providing those skills are addressed beyond traditional training methods.
- d. **Oil Spill Prevention:** Among the statutes that restrict the discharge of pollutants into U.S. waters are: (1) The Federal Water Pollution Control Act (FWPCA); (2) The Ports and Waterways Safety Act (PWSA); (3) The Port and Tanker Safety Act (PTSA); (4) The Marine Protection, Research and Sanctuaries Act (MPRSA); (5) The Act to Prevent Pollution From Ships (APPS), resulting from the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78); and (6) The National Environmental Policy Act (NEPA).

The Oil Pollution Act of 1990 (OPA 90) amended the PWSA and imposes new requirements on the operation of oil tankers in the U.S and enhances the Coast Guard's authority to effectively regulate the conduct of oil tankers and merchant marine personnel in the U.S.

The principal statutes for controlling marine pollution are the FWPCA and APPS (MARPOL 73/78), which provide for the prevention of marine pollution by oil, hazardous substances, and sewage. The prevention aspect of the FWPCA and MARPOL 73/78 and their implementing regulations include the control of commodity handling operations, and the design and construction of vessels and facilities (onshore and offshore), to minimize the occurrence of harmful discharges. To this end, federal responsibility for pollution prevention is shared between the Coast Guard and EPA. The latter is responsible for all facilities, onshore and up to 200 miles offshore that are not transportation related. The Coast Guard, under the authority of 33 U.S.C. 1321(j)(1), promulgates regulations that provide equipment requirements, operating procedures, and training of personnel from vessels and "transportation related" facilities.

- e. **Oil Spill Preparedness and response:** The Oil Pollution Act of 1990 (OPA) established Preparedness as a cornerstone of effective pollution response. The Coast Guard has a very robust spill preparedness and response program, in which the state is already a major player. The Coast Guard, Environmental Protection Agency, other Federal agencies, and state planners work closely on the Area Committee in development and maintenance of the Area Contingency Plan. Based on identified risks, response resource needs are identified, plans are developed and personnel are trained in their response roles. The plans are tested in exercises and real time pollution events, and are revised as appropriate, based on the lessons learned, thereby continuously improving preparedness.

- f. **Waterways Management:** With primary authority derived from the Ports and Waterway Safety Act (PWSA), the Coast Guard marks waterways, provides vessel traffic services, and otherwise provides vessel traffic management controlling vessel movements as necessary.

ATTACHMENT 2 – GRAPHIC DISPLAY OF CG SPILL DATA

