EVALUATION OF THE NEW CARISSA INCIDENT FOR IMPROVEMENTS TO STATE, FEDERAL, AND INTERNATIONAL LAW

BY

RICHARD G. HILDRETH, PROFESSOR OF LAW AND CO-DIRECTOR

OCEAN AND COASTAL LAW CENTER
SCHOOL OF LAW
UNIVERSITY OF OREGON
EUGENE, OREGON

OCTOBER 2000

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Evaluation of the New Carissa Incident for Improvements to State, Federal, and International Law

by

Richard G. Hildreth, Professor of Law and Co-Director,
University of Oregon Ocean and Coastal Law Center*

The New Carissa's 1999 groundings and oil spills on the Oregon coast tested state, federal, and international laws, regulations, and procedures designed to prevent such incidents or, when they do occur, to provide effective responses. The report summarized here evaluates the adequacy of that legal framework and recommends changes at the state, federal, and international levels, with emphasis on (a) the safety of non-tank vessels like the New Carissa, (b) the further strengthening of coastal navigation and other rules that are designed to prevent such incidents and are applicable to foreign-flag and domestic vessels navigating in state and federal waters, (c) the rules and procedures governing official response team actions such as vessel scuttling, and (d) the timeliness and adequacy of compensation for response costs, damages to natural resources, restoration costs, and losses suffered by those dependent on injured or threatened natural resources. The report's recommendations to the 2001 Oregon legislature are as follows:

1. Coordinate state legislative responses to the New Carissa incident with existing and future federal laws and regulations by including express statutory

---

* The author gratefully acknowledges the research support of the University of Oregon Office of Research and Faculty Development and the law school's Luvaas faculty fellowship; the research assistance of Ocean and Coastal Law Center librarian Andrea Coffman and law students Camilla Boyte, Kassandra Brown, Wayne Dengal, Tim Felling, Matthew Mattson, Tina Otto, and Lisa Thomas; and the manuscript assistance of Ocean and Coastal Law Center office manager Dianne Bass. This report is dedicated to Nancy Farmer, who has moved on to other law school responsibilities after so capably serving as the Ocean and Coastal Law Center's office manager these many productive years. Attorney Fred Boss of the Oregon Department of Justice and Jean Cameron, Executive Coordinator of the States/British Columbia Oil Spill Task Force, provided information which was very helpful in the production of this report. The report's conclusions and recommendations are solely the author's.

language providing that state requirements can be met by compliance with comparable federal requirements, if any, and repeal state provisions covering issues on which a directly conflicting federal rule subsequently is adopted.

2. On issues where current federal and international approaches are deemed to be inadequate, couple vessel compliance with state standards with specific limits on vessel liability in place of the otherwise applicable unlimited liability.

3. Enact legislation extending Oregon's pilotage grounds to include all of the ocean waters inside the state's boundary (three nautical miles offshore), placing pilots in complete charge of vessel navigation within that pilotage ground, and immunizing pilots from liability while performing their pilot duties, all in coordination with the related changes in federal law recommended in this report.

4. Mandate the use of tug escorts for vessels over a specific size navigating in waters or under conditions posing an above average risk of an accident, where studies show the risk would be significantly reduced by the use of tug escorts.

5. Broaden Oregon Revised Statutes (ORS) section 468B.310 to include liability for economic losses caused by spills that are not connected to physical injuries to persons or property, e.g., lost income or diminished profits resulting from oil spill damage to natural resources relied upon by individuals and companies for income.

6. Establish an oil spill damages compensation fund funded with fees or taxes imposed on the various sectors of the petroleum industry operating in Oregon and modeled on similar funds established by other coastal states.

7. In addition to establishing the fund recommended above, increase the state's financial assurance requirements for cargo and passenger vessels over three hundred gross tons, amend ORS section 468B.480 to authorize use of the required financial assurance to reimburse the state for damage claims paid out of the fund, and amend ORS sections 468B.475–468B.485 to include non-tankers as well as tankers.

8. Mandate the geographic extension of statutorily required contingency plans for non-tankers to the open coast between ports where spills can result from groundings such as the New Carissa's, in coordination with the geographic expansions of regional contingency plans recommended by the States/British Columbia Oil Spill Task Force and similar changes in federal contingency plan requirements recommended below.

9. Support an Oregon Ocean Policy Advisory Council study of the designation of state and federal marine protected areas in important Oregon offshore areas such as Heceta-Stonewall Bank, in coordination with regional and federal efforts to establish a West Coast Offshore Vessel Traffic Risk Management Scheme.

10. Support the preparation by the Oregon Department of Fish and Wildlife of detailed schedules assigning dollar values to all significant coastal flora and fauna, which can be used to calculate damages in vessel incidents.

11. Enact state wreck removal legislation to impose strict liability on vessel owners for removal and to establish a wreck removal fund supported by fees assessed against vessels navigating in state waters, in addition to the state spill damages fund recommended above and other financial responsibility requirements.

Pending legislative action, the Oregon Department of Environmental Quality (DEQ), acting under its existing statutory authority, should administratively extend the geographic coverage of non-tanker spill contingency plans to the open coast between ports.

The report makes the following recommendations to the 107th Congress:

1. Ratify the 1996 Protocol to the 1972 London Dumping Convention through appropriate amendments to the Ocean Dumping Act, including a waiver of the Protocol's emergency exceptions.

2. Support the adoption and ratification of the International Maritime Organization (IMO) Convention on Compensation for Pollution from Ship's Bunkers, which would create a regime of compulsory insurance and direct action for bunker fuel spills (like the New Carissa's) that is compatible with the existing regime for oil tankers.

3. Ratify and implement the 1996 International Convention on Liability and Compensation of the Carriage by Sea of Hazardous and Noxious Substances (HNS Convention), which would extend the International Convention for the Prevention of Pollution from Ships (MARPOL) to cargos other than oil.

4. Accede to the 1982 United Nations Convention on the Law of the Sea.

5. Enact section 203 of 1999 H.R. 820, which would deny entry into the U.S. territorial sea of vessels not in compliance with international safety and environmental

protection standards and control operation of all vessels threatened by hazardous circumstances with a mandate that regulations issued under section 203 be internationally disseminated through the IMO and coordinated with Canada and Mexico.

6. Enact amendments to U.S. vessel pollution laws such as the Clean Water Act (CWA), the Ocean Dumping Act, the Oil Pollution Act (OPA), the Ports and Waterways Safety Act (PWSA), and the Act to Prevent Pollution by Ships (APPS) to authorize their enforcement in the U.S. twelve-nautical-mile-wide contiguous zone that was proclaimed by President Bill Clinton in August 1999 and is adjacent to the territorial sea.

7. Amend the PWSA, in light of the United States Supreme Court's March 2000 Intertanko decision, to expressly authorize broader state roles in vessel pollution prevention than the Court recognized in Intertanko, e.g., by amending the PWSA to authorize state laws and regulations that do not directly conflict with federal regulations issued under that act.

8. Amend federal law to subject vessels engaged in domestic trade between U.S. ports, as well as those engaged in foreign trade, to state pilot requirements and to specifically authorize geographically broad state vessel anchoring and pilot requirements extending as far seaward as the state's boundary (generally three nautical miles offshore), including appropriate advance notification requirements.

9. Amend the federal CWA and OPA to raise liability limits and associated financial responsibility requirements and to require non-tankers over three hundred gross tons to have oil spill contingency plans covering the U.S. twelve-nautical-mile-wide territorial sea as well as port areas which are coordinated with similar Canadian requirements and also are coordinated regionally through such entities as the States/British Columbia Oil Spill Task Force.

10. Amend the federal Wreck Act to specifically authorize state wreck removal liability legislation.

11. Support the negotiation, adoption, and ratification of an IMO-administered Convention on Wreck Removal similar to the IMO Legal Committee's recent draft convention.

This report recommends that the Coast Guard and other federal agencies not only participate in the federal legislative and international treaty decisions recommended above and below, but also expand the successful enforcement efforts

of MARPOL and the APPS against cruise ship violators to other vessels that violate those and related laws. This report also recommends that the national Commission on Ocean Policy, established by the federal Oceans Act of 2000, study the pollution threats posed by non-tankers like the New Carissa and make further recommendations to Congress and the president regarding incident prevention and response.

This report's recommendations for international treaty negotiation and implementation include

1. adoption of the IMO draft Convention on Compensation for Pollution from Ship's Bunkers, recommended above for U.S. ratification;

2. IMO consideration of improvements to MARPOL, including amendments that would give port or coastal states that discover violations broader powers to maintain proceedings relating to those violations against offending vessels, sanction flag states for failure to comply with mandatory reporting requirements, and publish a list of flag states that have documented how they comply with relevant vessel navigation safety conventions;

3. adoption of the IMO Legal Committee's draft Convention on Wreck Removal, recommended above for U.S. ratification;

4. IMO approval, for inclusion on international charts, of relevant portions of the proposed West Coast Offshore Vessel Traffic Risk Management Scheme; and

5. adoption of any implementation recommendations generated by the IMO-coordinated review of sea disposal of vessels.

The reasons for and implications of these changes are thoroughly discussed in this project's full report, whose Table of Contents is set forth above.

The full report is available on the Center's web site <http://oceanlaw.uoregon.edu/> or by contacting the Center's office manager at (541) 346-3845 (voice); (541) 346-1564 (fax); Ocean and Coastal Law Center, School of Law, 1221 University of Oregon, Eugene, Oregon 97403-1221.

Evaluation of the New Carissa Incident for Improvements to State, Federal, and International Law

by

Richard G. Hildreth, Professor of Law and Co-Director,
University of Oregon Ocean and Coastal Law Center**

Introduction

On February 4, 1999, a month after the United Nations Year of the Ocean ended, the 639-foot, 36,500-ton, Panamanian-flagged, Japanese-managed wood chip carrier New Carissa, with 400,000 gallons of bunker and diesel fuel aboard, dragged its anchor and was beached outside the port of Coos Bay, Oregon. The approximate value of the ship prior to its beaching was between $10 and $20 million. One month later, the New Carissa's 440-foot bow section again was beached, this time outside Alsea Bay eighty miles north of Coos Bay, with approximately 130,000 gallons of fuel still aboard; its 199-foot stern section remained beached at Coos Bay. During the previous month the vessel had split in two due to surf action and intentional burning, resulting in possibly the largest vessel fire ever on the West Coast, with approximately 200,000 gallons of fuel burned and up to 70,000 gallons of fuel spilled. Oiled species included snowy plover and marbled murrelet birds, which are protected under the federal Endangered Species Act and Migratory Bird Treaty Act.

The United States Environmental Protection Agency (EPA) concurred with the decision to burn and formally deferred to the Coast Guard on whether and how to

---

** The author gratefully acknowledges the research support of the University of Oregon Office of Research and Faculty Development and the law school's Luvaas faculty fellowship; the research assistance of Ocean and Coastal Law Center librarian Andrea Coffman and law students Camilla Boyte, Kassandra Brown, Wayne Dengal, Tim Felling, Matthew Mattson, Tina Otto, and Lisa Thomas; and the manuscript assistance of Ocean and Coastal Law Center office manager Dianne Bass. This report is dedicated to Nancy Farmer, who has moved on to other law school responsibilities after so capably serving as the Ocean and Coastal Law Center's office manager these many productive years. Attorney Fred Boss of the Oregon Department of Justice and Jean Cameron, Executive Coordinator of the States/British Columbia Oil Spill Task Force, provided information which was very helpful in the production of this report. The report's conclusions and recommendations are solely the author's.

scuttle the New Carissa (Malek and Vogt 1999). The initial attempt to tow the bow section offshore for scuttling failed when the towline snapped fifty miles offshore in a one-hundred-year storm event, resulting in the bow beaching and spilling more oil at Alsea Bay. The bow was again towed offshore and then sunk 324 statute miles offshore in water 10,866 feet deep by U.S. Navy gunfire and a submarine torpedo. EPA regulations issued under the federal Ocean Dumping Act purport to exempt such emergency vessel scuttlings from the act's elaborate permit requirements.

In April 1999 a mast was cut off of the stern section and dumped over the side. Salvage operations that were intended to remove the stern section from the beach outside Coos Bay were abandoned in early November 1999. So far, total salvage and cleanup response costs of $35 million have greatly exceeded the vessel's roughly $21 million in spill liability insurance required by the federal Oil Pollution Act (OPA), with only a few claims for damages to natural resources or economic losses having been paid.

As responses to the New Carissa events continued on the central Oregon coast throughout 1999, there were six serious grounding incidents in the Columbia River, one in the entrance to Yaquina Bay, and another off the Hawaiian island of Kauai involving both U.S.- and foreign-flag vessels. On June 10, the SS Fredericksburg, a loaded oil tanker, grounded under power at mile forty-three in the Columbia River. On September 7, the Cenk Kaptanoglu, a bulk carrier 611 feet in length, lost all power and collided with the Kalama North Dock in Washington State. On October 19, the Hanjin Hong Kong, an 800-foot container ship, grounded under power at mile forty in the Columbia River. On November 9, the Sveti Nikola 1, a 600-foot ship, grounded under power at mile twenty-nine in the Columbia River. Fortuitously, these incidents did not result in accidental discharges of oil. The Fredericksburg, Hanjin Hong Kong, and Sveti Nikola 1 groundings occurred in areas of the Columbia River characterized by soft mud banks. The Cent Kaptanoglu was not so fortunate when she lost power. That vessel careened out of the shipping channel and collided with the Kalama North Dock. The damage, while extensive, was restricted to the forward portion of the vessel and no fuel oil was spilled. In the Columbia River, no oil was discharged, and five of the six grounded vessels were refloated without serious damage to public or private property. However, spilled fuel oil from the wrecked commercial fishing vessels Blue Heather and Van Loi fouled important nearshore areas in Oregon and Hawaii, respectively.

In 1984, the loaded tanker Mobile Oil lost steering, ran uncontrollably out of the channel, and grounded on Warrior Rock in the Columbia River. Except for location, that incident was similar to the 1999 Fredericksburg grounding. Both vessels were loaded tankers, both experienced steering failure, and both grounded. The primary

difference was the Mobile Oil grounded on rock and spilled a significant quantity of oil into the Columbia River. The Fredericksburg came ashore in an area of the river characterized by soft mud banks and suffered no damage. In November 1983, the 3,800-ton freighter Blue Magpie, while attempting to enter Yaquina Bay during a storm without a pilot, grounded on the north jetty, broke up, and spilled all of its over two thousand barrels of fuel oil (Good et al. 1987).

During the 1990s there were several similar incidents in Alaska, California, Washington, and British Columbia waters. A spill occurred on November 26, 1997, as the result of a severe storm driving the M/V Kuroshima onto a rocky shoal near Dutch Harbor, Alaska, as the vessel tried to pull anchor. A total of thirty-nine thousand gallons of bunker fuel oil were lost. A significant amount of the oil was blown into a freshwater salmonid lake during the event. A total of 154 dead birds were recovered. Oversight costs were estimated at $693,000 for the state and $4,800,000 for the U.S. Coast Guard. The total cost of the spill to the responsible party has not been released, but it has been rumored to be approximately $20 million.

In California, the M/V Kure, a bulk carrier, accidentally punctured its hull on a reinforced concrete piling while maneuvering along a pier in Humboldt Bay, California, on November 5, 1997. Approximately forty-five hundred gallons of fuel oil were spilled. Cost of the cleanup alone is estimated to be between $12 and $15 million.

In Washington State, the Tenyo Maru was cut in half and sank with the loss of one life and a spill of least one hundred thousand gallons of heavy fuel oil and diesel on July 22, 1991. The Tenyu Maru was a large fish processor. It was hit by the Tou Hai, a Chinese freighter that failed to respond to repeated warnings from the Canadian vessel traffic system. Although the collision occurred in Canadian waters, Washington's Olympic Coast was severely impacted.

Outside U.S. waters, in April 1999, the British flag tanker Ekturus, carrying twenty thousand tons of oil, grounded on a sandbar in the Baltic Sea off St. Petersburg, Russia. Fortunately, while the impact punched a hole in the tanker's hull, the vessel's oil tanks were undamaged. In July 1999 a grounded cargo boat spilled fuel oil into waters surrounding Isabela Island in the Galapagos. In 1995 the ore carrier Iron Barron went aground off the coast of Tasmania, Australia. In June 2000 the Panamanian-registered ore carrier Treasure sank and spilled its fuel oil near South Africa's Roffen Island, a designated nature reserve and home to a large penguin colony. The Treasure, which had developed a seventeen-yard-by-ten-yard hole in its hull prior to sinking due to rusting and aging, was being towed away from shore when the towline snapped.

In July 1998, when tighter international vessel safety standards went into effect, the United Nations International Maritime Organization (IMO) reported that 13 percent of the world's commercial fleet was not in compliance with them. In July 1991 the Hellenic Register tanker Kirki lost its bow off Western Australia, despite having recently received satisfactory marine survey certificates. However, bulk carriers such as the New Carissa currently are regarded as posing higher risks to the marine environment than do tankers, because of their greater use of ballast water and higher port safety inspection failure rate (Bateman 1999).

Studies show that one in every one hundred vessels (both foreign flag and U.S. flag) entering U.S. ports reports steering or propulsion failures, and they also predict that vessel traffic into U.S. ports will triple in the next two decades. These studies clearly demonstrate the national significance of a thorough evaluation of the laws surrounding the New Carissa and related incidents (States/British Columbia Oil Spill Task Force 1999). Similarly, testimony presented at a March 1999 House of Representatives joint subcommittee hearing commemorating the tenth anniversary of the Exxon Valdez spill emphasizes the need for increased Coast Guard regulation of non-tank vessels like the New Carissa with respect to oil spill contingency planning: "Approximately half of the spills in the Pacific EEZ [exclusive economic zone] have historically been from vessels other than tankers" (Cameron 1999).

The New Carissa's 1999 groundings and oil spills on the Oregon coast have tested state, federal, and international laws, regulations, and procedures designed to prevent such incidents or, when they do occur, to provide effective responses (Hunter et al. 1998; Weiss et al. 1998). Current rules were established largely in response to the 1989 Exxon Valdez spill in Prince William Sound, Alaska (Corporations and the regulatory environment 1999). These laws are part of a larger legal framework designed to ensure that marine resource uses like commercial navigation (Allen 1999; Quirk 1999) proceed on a sustainable basis that protects public safety and marine ecosystems (including species inhabiting those ecosystems); when pollution occurs, the principles of sustainable development suggest that costs should be borne fully (internalized) by the polluter, e.g., the owners of the New Carissa (Hildreth 1997). Thus, effective legal responses should include monetary compensation to public and private entities and individuals who incur costs and suffer losses due to vessel pollution. Such compensation should cover damages to natural resources, restoration costs, and losses suffered by those dependent on injured or threatened natural resources. Strict liability for these costs and losses should be imposed on the responsible party. Internalization also occurs through vessel owner expenditures on vessel design and for compliance with other requirements intended to prevent pollution.

This research project has evaluated the adequacy of the legal framework surrounding the New Carissa and related incidents in order to develop recommendations for change at the state, federal, and international levels, with emphasis on (a) the safety of non-tank vessels like the New Carissa, (b) the further strengthening of coastal navigation and other rules that are designed to prevent such incidents and are applicable to foreign-flag and domestic vessels navigating in state and federal waters, (c) the rules and procedures governing official response team actions such as vessel scuttling, and (d) the timeliness and adequacy of compensation for response costs, damage to natural resources, restoration costs, and losses suffered by those dependent on injured or threatened natural resources. Publication and dissemination of the project's analyses and recommendations are intended to lead to strengthened state, federal, and international laws designed to reduce the likelihood of New Carissa–type incidents and to improve the response procedures and liability rules applicable to future incidents.

Methodology

The complete state, federal, and international legal framework, including judicial interpretations, applicable to the New Carissa incident was established using the resources of the law school's Ocean and Coastal Law Center library collection. Application of this framework to the New Carissa incident was evaluated using official public records generated by the incident, media accounts, and in-person, telephone, fax, e-mail, and mail correspondence with involved interested parties identified in official records and media accounts, from both within and outside the official response effort. We were aided in this work by insights gained from an expert panel discussion of the New Carissa incident held on Friday, March 3, 2000, at the law school and cosponsored by the Ocean and Coastal Law Center and the law school's Journal of Environmental Law and Litigation. Panelists were attorney Fred Boss of the Oregon Department of Justice, Lorren Garner of the Oregon Department of Environmental Quality (DEQ), and Oregon House of Representatives member Mike Lehman of Coos Bay. Representative Lehman chaired the Oregon governor's New Carissa Review Committee discussed further below.

The federal laws whose implementation with respect to the New Carissa was evaluated include the Act to Prevent Pollution from Ships (APPS); the Clean Water Act (CWA); the Comprehensive Environmental Response, Compensation, and Liability Act; the Endangered Species Act; the International Regulations for Preventing Collisions at Sea; the Intervention on the High Seas Act; the Limitation of Shipowner Liability Act; the Marine Mammal Protection Act; the Migratory Bird Treaty Act; the Ocean Dumping Act; the Oceans Act of 2000; the Oil Pollution Act (OPA); the Ports and Waterways

Safety Act (PWSA); and the Wreck Act. Each of these federal laws and the associated federal regulations, contingency plans, state laws and regulations, and international treaties (IUCN 1995; Year of the Ocean 1998) were evaluated for improvement regarding both prevention of future incidents and liability for incidents that do occur.

Proposed federal legislation, including Oregon Congressman Peter DeFazio's and Senator Ron Wyden's proposed amendments to the PWSA, and proposed international treaties also were evaluated for additional changes. The proposed PWSA amendments, which are contained in section 203 of 1999 H.R. 820 and 1999 S. 498, would deny entry into the U.S. territorial sea by vessels not in compliance with international safety and environmental protection standards and would control operation of all vessels threatened by hazardous circumstances. H.R. 820 passed the House during the 106th Congress but was still pending in the Senate at the time this report was completed. This report contains specific recommendations to the 107th Congress for changes in federal statutory law and related changes in international treaties and federal agency regulations. It also recommends that the national Commission on Ocean Policy, established by the federal Oceans Act of 2000 (Pub. L. No. 106-256), study the pollution threats posed by non-tankers like the New Carissa and make further recommendations to Congress and the president regarding incident prevention and response.

Key departure points for the project's evaluation of state law and regulations were (1) Oregon Revised Statutes (ORS) sections 468B.300–468B.500 and the state's vessel pilotage law (ORS section 776.015), (2) proposed 1999 Oregon House Bill (H.B.) 3601 and 1999 Oregon Senate Bill (S.B.) 1305 (which were not enacted), (3) reports on the incident that were made to the Oregon Ocean Policy Advisory Council at its June 4, 1999, and subsequent meetings, (4) the October 19, 1999, report of the United States Coast Guard commandant on the New Carissa incident (Gilmour 1999), and (5) the findings of the nine-member New Carissa Review Committee appointed in April 1999 by Governor John Kitzhaber, chaired by Representative Lehman, and staffed by DEQ's John Betz. The committee was charged with identifying ways to improve oil spill prevention and response generally and state and federal agency coordination in particular, as well as appropriate local, state, and volunteer response roles. Had they been enacted, H.B. 3601 and S.B. 1305 would have required foreign-flag vessels like the New Carissa to utilize a state-licensed pilot while navigating within three miles of the Oregon coast. ORS sections 468B.300–468B.500 provide the current statutory framework for oil spill prevention, emergency response plans, and damages liability. This report contains specific recommendations for changes in Oregon statutory law for consideration by the 2001 Oregon legislature.

Judicial interpretations of the above laws that are of significance to future incident prevention and damages liability also have been evaluated. Most significant of these is the United States Supreme Court's March 2000 opinion in United States v. Locke, 120 S. Ct. 1135 (2000). That opinion's interpretations of international and congressional allocations of federal and state responsibilities for preventing and responding to New Carissa–type incidents are reflected in this report's recommended changes in international, federal, and state law.

Ocean Dumping of the Bow and Other Parts of the *New Carissa*

Ocean dumping of the New Carissa's bow and other parts is governed by the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (11 I.L.M. 1294), known as the London Dumping Convention or London Convention. The convention came into force in 1975, and the United States is a party. For waters and persons subject to U.S. jurisdiction, the London Convention is implemented by the federal Ocean Dumping Act (33 U.S.C. § 1401 et seq.) and regulations issued by the EPA and the Corps of Engineers (Corps). Neither EPA nor the Corps issued any permits for dumping in connection with the New Carissa.

Article III(1)(a)(ii) of the 1972 London Convention defines "dumping" as "any deliberate disposal at sea of vessels. . . ." Article IV and Annex I(5) to the convention prohibit nations party to the convention from dumping specifically listed hazardous substances, including refined petroleum products such as the 135,000 gallons of fuel oil that remained in the New Carissa's bow, but only if the substances were "taken on board for the purpose of dumping," which was not the case for the New Carissa. Annex II(C) requires special care in the issuing of permits to dump specifically listed substances and materials, including "bulky wastes liable to sink to the sea bottom which may present a serious obstacle to fishing or navigation." This clause would seem to apply to the dumping of the New Carissa's bow in March 1999, 324 statute miles offshore in water 10,866 feet deep, and the dumping of the stern mast over the side of the grounded stern in shallow waters just offshore in April 1999, unless an exception to the Annex II permit process was applicable.

The convention's only exception applicable to the Annex II special permit process (established under Article IV) is provided in Article V(1):

> The provisions of Article IV shall not apply when it is necessary to secure the safety of human life or of vessels, aircraft, platforms or other man-made structures at sea in cases of force majeure caused by stress of weather, or in any case which constitutes a danger to human life or a real threat to vessels,

> aircraft, platforms or other man-made structures at sea, if dumping appears to be the only way of averting the threat and if there is every probability that the damage consequent upon such dumping will be less than would otherwise occur. Such dumping shall be so conducted as to minimise the likelihood of damage to human or marine life and shall be reported forthwith to the [International Maritime] Organisation.

By most accounts, the grounded bow did not threaten human life, vessels, aircraft, platforms, or other man-made structures, nor did dumping appear to be the only way of averting such threats (Murakami 1999). The stern mast may well have constituted a danger to humans working to salvage the stern and prevent further oil spills from it.

The convention's only other emergency provision (Article IV(1)(a)) is limited to the emergency dumping of the otherwise prohibited hazardous substances listed in Annex I and to circumstances where the emergency poses unacceptable risks to human health (Article V(2)). Interestingly, the Article IV(1)(a) exception was initially proposed by the United States and opposed by most coastal and developing nations. Similar to the 1996 Protocol discussed below, Article V(3) authorizes nations ratifying the convention to waive this emergency exception, probably in recognition of the controversy that surrounded it.

The United States did not waive the Article IV(1)(a) exception when it ratified the convention by enacting the Ocean Dumping Act. However, the issuance of emergency permits under the act is limited to "industrial wastes," which are defined as wastes generated by a manufacturing or processing plant and clearly do not include the bow or other parts of the New Carissa (33 U.S.C. § 1412a). Paralleling London Convention Article V(1) quoted above, the act waives otherwise applicable civil and criminal penalties (e.g., for dumping without a required permit) "for dumping materials from a vessel if such materials are dumped in an emergency to safeguard life at sea" (33 U.S.C. § 1415(h)), which was not the case for the dumping of the New Carissa's bow.

An EPA regulation implementing the Ocean Dumping Act does grant all persons and entities a general permit to transport vessels from the United States for disposal in the ocean, subject to conditions, including at least one month's advance notice to the relevant EPA regional administrator (40 C.F.R. § 229.3). The regulation purports to except undefined "emergency situations" from the general permit requirements and was used to support the dumping of the New Carissa (Hall 1999). However, the regulation's emergency exception would appear to be invalid because, as discussed above, the Ocean Dumping Act, under which the regulation is issued, narrowly limits emergency dumping to material dumped to safeguard life at sea and to "industrial

wastes" not including vessels.

CWA section 311(c) (codified at 33 U.S.C. § 1321(c)) does provide federal authority to "remove" or "destroy" a vessel like the New Carissa that is discharging or threatening to discharge oil or other hazardous substances in accordance with the National Contingency Plan created under CWA section 311(d). The National Contingency Plan regulations, which were relied upon by the Coast Guard in disposing of the New Carissa, repeat this authorization (400 C.F.R. § 300.415). However, it is doubtful that Congress intended the terms "remove" and "destroy" to authorize the ocean dumping of vessels without compliance with the Ocean Dumping Act's specific provisions applicable to vessel dumping discussed above. As discussed next, U.S. ratification of the 1996 Protocol to the 1972 London Convention could clarify any ambiguities in U.S. law and policy on vessel dumping.

The United States has signed but not yet ratified the 1996 Protocol, which is not yet in force. As of August 2000, ten out of the twenty-six ratifications required to bring the Protocol into force had been received (fifteen of the twenty-six must be parties to the current London Convention). Different from the original London Convention, under Article 4 the 1996 Protocol, only wastes that are listed in Protocol Annex I may be considered for dumping, including "vessels and platforms or other man-made structures." Protocol Annex I requires the removal from the vessel of material capable of polluting the marine environment to the maximum extent and limits the dumping of vessels to situations where the dumped vessel posed no serious obstacle to fishing or navigation. While Protocol Annex I technically was not applicable to the dumping of the New Carissa's bow, the bow appears to have been eligible for dumping under Annex I, with the most serious question being whether fuel in the bow had been removed to the "maximum extent" as required by Protocol Annex I and current EPA regulations implementing the Ocean Dumping Act and the original London Convention (40 C.F.R. § 229.3(a)(3)).

Protocol Annex II establishes the assessment process for wastes that may be considered for dumping under Protocol Annex I. Under Protocol Annex II, ocean dumping permits shall be refused where "opportunities exist to re-use, recycle, or treat the waste without undue risks to human health or the environment or disproportionate costs"; furthermore, if assessment reveals that "adequate information is not available to determine the likely effects" of the proposed ocean disposal, then ocean dumping should not be considered further. Finally, under Protocol Annex II, an ocean dumping permit should be issued only after all impact evaluations are completed and monitoring requirements are determined.

Protocol Article 8(2) provides substantive and procedural exceptions "in

emergencies posing an unacceptable threat to human health, safety, or the marine environment and admitting of no other feasible solution," which could be applicable to a future New Carissa event once the United States has ratified the Protocol and the Protocol has come into force. Similar to the 1972 London Convention, Protocol Article 8(3) would allow the United States to waive this emergency exception once it ratifies or accedes to the Protocol. The U.S. decision on whether to waive the emergency exception should be coordinated with the outcome of the vessel disposal study established under IMO Resolution LC.56 (SM), discussed below, and based on thorough examination of whether emergency vessel dumping without full compliance with the requirements of Protocol Annexes I and II should be allowed. The precautionary approach reflected in Protocol Annex II and elsewhere in international environmental law suggests that the United States should consider waiving the Protocol's emergency exception and reflect that decision in appropriate amendments to the Ocean Dumping Act necessitated by ratification of the 1996 Protocol.

Although Annex I to the 1996 Protocol includes vessels in the list of wastes that may be considered for dumping at sea, under Resolution LC.56 (SM) (reproduced in this report's Appendix B), the IMO is coordinating a review of sea disposal of vessels to take place at the London Convention's twenty-second Consultative Meeting to be held later in the year 2000. In preparation for that meeting, the convention's Scientific Group will be preparing a Draft Specific Guidance for Assessment of Vessels, with the EPA serving as the lead agency in the preparation of the draft guidance. In addition to the United States, permits for vessel disposal recently have been issued by Australia, Brazil, Canada, Chile, Japan, New Zealand, Norway, and South Africa (Coenen 1999). Very relevant to this review is the decision by the western European nations that negotiated the 1992 regional OSPAR Convention (32 I.L.M. 1069), which covers ocean waters off Portugal north to Scandinavia, to prohibit the deliberate ocean dumping of ships and aircraft starting in 2005 (Annex II, Article 3(2)(e)), assuming the convention comes into force by then, which seems quite likely.

Another important factor in the United States' decision on whether to waive the 1996 Protocol's emergency exception is the example that emergency disposal of ships sets for other nations. By broad consensus reflected in the 1972 London Convention, its 1996 Protocol, and associated regional conventions, use of the oceans for intentional waste disposal has been reduced significantly but not eliminated. There is significant evidence of illegal dumping of high- and low-level radioactive wastes by the Soviet and Russian navies prior to and after the breakup of the Soviet Union. Included among these wastes were nuclear reactors from decommissioned submarines (Guruswamy et al. 1999).

Under the circumstances, the dumping of the New Carissa's bow offshore was

a relatively expeditious way to deal with a major environmental problem without causing significant environmental injuries. But such dumping opens the door for other claims of emergency justifying the dumping of vessels or contaminated vessel parts without compliance with any domestic and international permit and consultation procedures that otherwise might be applicable. Both the 1996 Protocol ratification process in the United States and the international follow-up to IMO Resolution LC.56 (SM) to study vessel disposal provide excellent opportunities to refine U.S. and international policy on vessel dumping in both emergency and nonemergency situations, e.g., the criteria for choosing vessel dumping locations contained in 40 C.F.R. § 229.3(a)(5) and (6).

The policy issues raised by emergency and nonemergency dumping of ships and parts of ships are similar to those raised by the dumping of other very large objects such as decommissioned offshore oil and gas production platforms like the North Sea Brent Spar platform, proposed for disposal in the Atlantic Ocean (Hunter et al. 1998). The lessons learned from the controversy surrounding that proposal (which did not involve an emergency) should be kept in mind when considering future U.S. policy on ship dumping. Such lessons also relate to the decommissioning of offshore oil and gas rigs off California, Alaska, and the Gulf Coast states.

The Role of Federal and International Salvage Law in Future Incidents

For a time after the New Carissa initially grounded, it looked like serious attempts to salvage the vessel intact would be made. The traditional focus of the international and federal law of salvage has been the compensation owed to a successful salvor by the vessel owner. Public employees engaged in salvage efforts generally do not receive salvage awards because their efforts are included in their employment duties. However, if their efforts are extraordinary, a court may award them salvage compensation. Also, a tug may not recover a salvage award from its tow unless it rescues the tow from an extraordinary peril (Maraist 1988).

If a vessel is abandoned at sea by its owner without hope of recovery, a salvor may carry out salvage without the permission of the owner. If the salvor negligently causes damage to the vessel, the courts will reduce the salvage award and even award damages against a salvor whose gross negligence results in damages exceeding the salvage award. However, until 1989, salvage law did not reflect any particular concern for environmental injuries inflicted during salvage operations.

The lack of concern in salvage law with environmental injuries changed in 1989 with the adoption of the International Convention on Salvage (reprinted in 1990

Lloyd's Mar. & Com. L.Q. 54). The convention came into force on July 14, 1996. The United States is a party to the convention, having ratified it in 1991 (137 Cong. Rec. S15,398–99 (daily ed. Oct. 29, 1991)). The entire convention has been incorporated into United States law as a self-executing treaty (S. Treaty Doc. No. 12, 102d Cong., 1st Sess. (1991), S. Exec. Rep. No. 17, 102d Cong., 1st Sess. 2 (1991)).

The convention codifies the idea that there are overriding environmental obligations in marine salvage (Article 1). Specifically, all parties involved in salvage operations are required to exercise due care to avoid damage to the environment (Article 8). Furthermore, the ability of coastal nations like the United States to supervise salvage operations is explicitly recognized (Articles 5 and 9). Under convention Article 13 (codified at 46 U.S.C. app. § 729), the criteria for a successful salvage award now include "the skill and efforts of the salvors in preventing or minimizing damage to the environment." Finally, under Article 14, even if the vessel is lost, "special compensation" equal to the expenses of the salvor in preventing or minimizing damage to the environment may be awarded to the salvor from the vessel owner. Even prior to the convention coming into force, a United States admiralty court relied on Articles 13 and 14 and considered the salvor's efforts to prevent environmental damage in determining the award. See Trico Marine Operators, Inc. v. Dow Chem. Co., 809 F. Supp. 440 (E.D. La. 1992). Thus, the 1989 convention helps all parties involved in New Carissa–type incidents—especially those parties considering possible salvage of the vessel involved—to maintain a focus on protecting the environment as part of their decision-making processes.

International Framework for United States Vessel Pollution Prevention and Liability Rules

To date the focus of most international vessel pollution conventions has been on the prevention, cleanup, and liability for spills of oil carried as cargo by tankers. A few conventions, such as the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL) (12 I.L.M. 1319) and others discussed below, also cover spills of bunker fuel, lubricating, and other oils by non-tankers such as the New Carissa, which sometimes carry large quantities of bunker fuel. The feasibility and expense of spill cleanup and the amount of damage done depends on the specific gravity of what is spilled:

> Refined petroleum products that are lighter than heavy diesel oil float, evaporate, mix, and disperse, but crude oil and heavy refined products are "persistent": They stick to shores, birds, and sea mammals, mix with water to form a brown "mousse," and stick to the bottom in lumps. Oils respond

to seawater temperatures, and so the spill of fairly light cargo becomes a bigger problem in very cold water than it is in very warm water. [Healy and Sharpe 1999]

In fact, bunker spills are more common than cargo spills from tankers and represent one-half of the total number of pollution claims. Bunker fuel oil is always heavy and dirty and thus significantly more expensive to clean up than some lighter oils carried as cargo, which evaporate and dissipate more readily. Thus, on a scale of one to three, Florida law (Fla. Stat. ch. 376.121(2)) places bunker and residual fuel oils in category 1, because they contain pollutants with the greatest propensity to cause injury to natural resources. Some vessel pollution insurance policies do not cover bunker fuel. Furthermore, bunker fuel cleanup costs can easily exceed the vessel owner liability limits of some existing spill liability funds. Under some spill liability regimes, bunker fuel spill insurance is not compulsory, and where there is coverage, direct action may not be possible against the insurance underwriters (Healy and Sharpe 1999). Therefore, the United States should support the adoption of (and Congress should ratify) the IMO draft Convention on Compensation for Pollution from Ship's Bunkers when it becomes available. This convention would create a regime of compulsory insurance and direct action for bunker fuel spills that is compatible with the regime for oil tankers.

The Senate also should ratify the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage by Sea of Hazardous and Noxious Substances (HNS Convention) (35 I.L.M. 1406), which is not yet in force. The HNS Convention would extend the MARPOL oil spill prevention, cleanup, and liability system (described below) to cargos other than oil, including many chemicals but excluding radioactive substances. The HNS Convention imposes strict but limited liability on vessel owners for damage to people, property, or the environment caused by discharges of the covered substances. Damages above the owner's liability limit are compensated from a fund containing £250 million (Hunter et al. 1998).

The international law of the sea has been codified in the 1982 United Nations Convention on the Law of the Sea (UNCLOS) (21 I.L.M. 1261), which entered into force in November 1994. However, the United States is not yet a party to the convention and thus may only assert those convention provisions that reflect principles of customary international law. See United States v. Royal Caribbean Cruises, 24 F. Supp. 2d 155 (D.P.R. 1997). Some of the UNCLOS provisions discussed below are not yet customary international law and thus not available to the United States; they are included to demonstrate why it would be advantageous for the United States, as a coastal nation interested in protecting its coastal environment from pollution from foreign-flag vessels like the New Carissa, to become a party to UNCLOS, as this

report recommends.

Under the international law of the sea, the United States may impose pollution discharge rules that are more stringent than otherwise applicable international standards on all vessels navigating within the U.S. territorial sea, which extends twelve nautical miles seaward (UNCLOS Article 211(4)). However, such rules cannot hamper the innocent passage of foreign-flag vessels (UNCLOS Article 24). In addition, UNCLOS Article 211(3) appears to authorize coastal nations to "establish particular requirements for the prevention, reduction, and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports or internal waters" so long as they give such requirements due publicity and communicate them to relevant international organizations such as the IMO.

Congressman Peter DeFazio's proposed amendments to the federal PWSA in response to the New Carissa incident (section 203 of 1999 H.R. 820) would deny entry into the U.S. territorial sea of vessels not in compliance with international safety and environmental protection standards and control operation of all vessels threatened by hazardous circumstances through regulations issued by the Secretary of Transportation and enforced by the Coast Guard. Section 203 provides:

> (a) NOTIFICATION OF COAST GUARD. Under regulations prescribed by the Secretary, a commercial vessel entering the territorial sea of the United States shall notify the Secretary not later than 24 hours before that entry and provide the following information:
>
> (1) The name of the vessel.
>
> (2) The port or place of destination in the United States.
>
> (3) The time of entry into the territorial sea.
>
> (4) Any information requested by the Secretary to demonstrate compliance with applicable international agreements to which the United States is a party.
>
> (5) If the vessel is carrying dangerous cargo, a description of that cargo.
>
> (6) A description of any hazardous conditions on the vessel.
>
> (7) Any other information requested by the Secretary.
>
> (b) DENIAL OF ENTRY. The Secretary may deny entry of a vessel into the territorial sea of the United States if:
>
> (1) The Secretary has not received notification for the vessel in accordance with subsection (a); or
>
> (2) The vessel is not in compliance with any other applicable law relating to marine safety, security, or environmental protection.

(c) DIRECTION OF VESSEL. The Secretary may direct the operation of any vessel in the navigable waters of the United States as necessary during hazardous circumstances, including the absence of a pilot required by state or federal law, weather, casualty, vessel traffic, or the poor condition of the vessel.

Additional related amendments to the PWSA recommended by this report include adding a section specifically authorizing state laws and regulations that do not directly conflict with regulations issued under the PWSA. Even without such an amendment, under Intertanko, and as part of PWSA Title I, section 203 of H.R. 820 and the regulations issued under it only would preempt state laws and regulations that directly conflicted with their requirements; the recommended amendment would clarify Congress' intent on this point. No state laws reviewed in this report appear to directly conflict with section 203.

Under PWSA section 11 (codified at 33 U.S.C. § 1230), regulations issued under section 203 should be internationally disseminated through the IMO and coordinated with Canada and Mexico. Because section 203 focuses on vessels in violation of international standards and threatened by hazardous circumstances, it does not appear to violate the innocent passage rights of foreign-flag vessels in the U.S. territorial sea. The impacts of section 203 and related PWSA amendments could be studied by the national Commission on Ocean Policy, established by the federal Oceans Act of 2000, and further recommendations regarding incident prevention could be developed for congressional action.

President Clinton's proclamation of a twelve-nautical-mile-wide contiguous zone adjacent to the U.S. territorial sea provides an additional twelve-nautical-mile-wide zone in which U.S. rules, adopted under UNCLOS Articles 211(3) and 211(4), may be enforced against foreign-flag vessels (64 Fed. Reg. 48,701 (1999)). Prior to UNCLOS Article 33(2), the maximum seaward limit for a contiguous zone was twelve nautical miles; however, Article 33(2) probably reflects current customary international law, and thus the proclamation's reliance on UNCLOS as the basis for a twenty-four-nautical-mile seaward limit for the contiguous zone is valid. Under Article 33(1)(a), the United States can prevent, in its contiguous zone, potential infringement by foreign-flag vessels of its pollution rules that are applicable in the twelve-nautical-mile-wide territorial sea and further inland as well as punish violations of those rules which have already occurred (Noyes 2000; Van Dyke 2000). In the contiguous zone, the Coast Guard may board and search a foreign-flag vessel suspected of violating U.S. pollution laws without first obtaining permission from the country whose flag the vessel flies. Several statutes authorize such actions against vessels to prevent violations of U.S. law (14 U.S.C. §§ 2, 89; 19 U.S.C. § 1581(a)).

As the proclamation itself states, it cannot amend existing federal law. Thus, one of this report's recommendations to Congress is to enact appropriate amendments to U.S. vessel pollution laws such as the CWA (33 U.S.C. §§ 1321(a)(9), 1321(m)(1)(a), and 1362(9)), the Ocean Dumping Act (33 U.S.C. § 1411(b)), OPA (33 U.S.C. § 2701(21) and (35)), the PWSA (33 U.S.C. § 1222(1)), and the APPS (33 U.S.C. §§ 1901(b), 1902(a)(2), and 1902(a)(3)) authorizing their enforcement in the wider contiguous zone.

With respect to the design, construction, manning, or equipment of foreign-flag vessels, the U.S. rules may only give effect to generally accepted international rules or standards. Many of those international standards are contained in MARPOL and its 1978 Protocol (17 I.L.M. 546), which are in force with the United States as a party. MARPOL is implemented by the federal APPS (33 U.S.C. § 1901 et seq.). The APPS includes a citizen suit provision (33 U.S.C. § 1910) authorizing "any person . . . adversely affected" to bring suit against violators of the act or federal officials failing to enforce the act, but the act does not appear to authorize private damage actions against violators. Successful federal prosecutions have been brought under related federal legislation against ships violating MARPOL and APPS rules on vessel garbage disposal and intentional oil disposal (Letourneau and Welmaker 1999–2000). See Colbro Ship Management Co., Ltd. v. United States, 84 F. Supp. 2d 253 (D.P.R. 2000); United States v. Royal Caribbean Cruises, 24 F. Supp. 2d 155 (D.P.R. 1997); United States v. Royal Caribbean Cruises, 11 F. Supp. 2d 1358 (S.D. Fla. 1998). The approach used for enforcement of MARPOL and the APPS in U.S. courts against cruise ship violators should be considered for expansion to other vessels that violate those and related laws (Dickman 1999).

For U.S.-flag vessels, UNCLOS Article 211(2) requires federal rules to "at least have the same effect as that of generally accepted international rules and standards." This requirement for even-handed treatment of U.S.-flag vessels, plus the fact that many foreign-flag vessels are owned by U.S. nationals, means that there are domestic political limits on the strength of such international standards (Weiss et al. 1998).

Vessels flying the flags of nations that are not parties to MARPOL end up being subjected to MARPOL standards through MARPOL Article 5(4)'s requirement that MARPOL parties, like the United States, apply MARPOL's requirements as necessary to ensure that vessels flying the flags of non-parties receive "no more favorable treatment" than vessels from MARPOL parties. In support of this requirement, the Coast Guard maintains a list of nations operating substandard vessels; these ships are subject to close scrutiny when they are in U.S., Canadian, Japanese, and other

ports (Hunter et al. 1998).

MARPOL is a comprehensive agreement on intentional and accidental oil discharges from ships (Duruigbo 2000; Mitchell 1994; Peet 1992). MARPOL has a three-pronged approach to pollution prevention that rests on (1) mandatory discharge standards, (2) construction, design, equipment, and manning specifications, and (3) navigation standards. While it is difficult, if not virtually impossible, for nations to monitor whether or not ships discharge their ballast tanks the required minimum fifty miles from shore, the standards for construction and navigation have resulted in numerous changes in the handling of oil (Hunter et al. 1998).

MARPOL's greatest success has been the creation of a compliance and enforcement regime that focuses on a complex documentation and certification process for oil tankers. International Oil Pollution Prevention (IOPP) certificates are required for every tanker over 150 tons and for all other ships over 400 tons (such as the New Carissa). Private, authorized "classification societies," not governments, issue the certificates, which provide evidence that MARPOL's technical standards for tank size, filter use, etc., are satisfied. MARPOL also provides for the revocation of an IOPP certificate in the event the certification society determines that a ship is not in compliance with the requisite provisions and standards. Operations involving oil onboard the vessel must be recorded in the required Oil Record Book (Hunter et al. 1998).

In addition, under the related International Convention on Oil Pollution Preparedness, Response, and Co-operation (OPRC Convention) (30 I.L.M. 733), vessels flying the flag of the nations party to the convention must have onboard an oil pollution emergency plan that meets the requirements of MARPOL Annex I, Regulation 26. Each nation must have a national oil spill contingency plan as well. Appendix C to this report reproduces a table provided by the States/British Columbia Oil Spill Task Force that compares U.S., MARPOL, Alaska, Washington, Oregon, and California contingency plan requirements. Convention compliance is overseen by the IMO. The convention is in force and the United States is a party.

Such technical specifications and certification by private parties have been largely responsible for the success of MARPOL, but they do have their drawbacks. The technical specifications that exist are so comprehensive and extensive that they cannot possibly be thoroughly tested at each inspection. Even the certifying parties, while operating under general guidelines, do not have a uniform format for their inspections and do not have uniform criteria, which makes evaluation by inspectors and port authorities difficult (Hunter et al. 1998).

The use of classification authorities has decreased the administrative burden on the governments of MARPOL nations, but the credibility of the certificates is directly related to the credibility of the issuing agency. There are some forty certification agencies about which nothing is really known. Nonetheless, the certificates must be respected by the governments of other countries (Hunter et al. 1998).

Some developing countries cannot afford to comply with MARPOL, and they argue that their classification societies should not be punished when they are doing the best they can. Nonetheless, the current practice of allowing sham IOPP certificates defeats the purpose of MARPOL's compliance strategy and provides an incentive for ships to fly "flags of convenience"—in this case, flags of nations not party to MARPOL. Following the example of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes (28 I.L.M. 657) and the Montreal Protocol on the Ozone Layer (32 I.L.M. 874), MARPOL parties could require that ships not enter port without IOPP certificates from MARPOL-authorized classification societies. That would compel non-MARPOL parties to ensure that their ships meet MARPOL standards without the costly MARPOL mandates of port waste discharge facilities (Hunter et al. 1998).

A number of other factors work against strong enforcement of MARPOL's provisions, even when violations are detected. The biggest reason for noncompliance is the poor economic conditions of many shipping companies. Marine shipping is a very competitive business and many companies cut costs by running old, poorly maintained vessels. The main reason for poor enforcement is the inadequate authority of the IMO, which has been given responsibility for developing rules but not the power to enforce them (Hunter et al. 1998).

The United States has enforcement authority against foreign-flag vessels as both a port state (MARPOL Articles 5 and 6; UNCLOS Article 218) and a coastal state (UNCLOS Article 220). By retaining UNCLOS's model of vesting primary enforcement authority in flag states, the authority of concerned coastal states is greatly restricted. At the same time, sovereign nations are wary of relinquishing enforcement authority to other nations, much less to international bodies. Thus, limiting the power of flag states or vesting enforcement authority in the IMO would also be strongly resisted by most countries. Since the vast majority of flag-of-convenience states are developing countries, their lack of resources to police large registered fleets is a very real problem. Moreover, dependence on registration fees as a source of national income creates a strong conflict of interest against vigorous prosecution of MARPOL violations (Hunter et al. 1998). Thus, the coastal states seeking to protect their coastlines and the flag states having jurisdiction over the actual vessels have competing interests that must somehow be reconciled. A ship

falls within the jurisdiction of the state of the flag it flies, subject only to the recognition that within another state's territory, that state has enforcement jurisdiction too. There is also an argument that the flag states have little incentive to enforce environmental regulations on their ships on the high seas, because enforcement would be difficult and violations do not really affect the state directly. With flag states primarily responsible for enforcement, it is possible for shipowners to "forum shop" for a state with lax enforcement of regulations (Hunter et al. 1998).

Thus, MARPOL has been criticized for putting too much enforcement authority in the hands of the flag states, which has allowed certain states to build a business of registering ships owned by noncitizens. It is important to point out, however, that shipowners derive other "benefits" from these flag-of-convenience states. They can often hire a less expensive crew because they are not bound by laws requiring certain pay levels. Liberia even allows anonymous registry for corporate-owned ships. Since there is no requirement that a ship be registered in the state of residence of its owner, the registrations may be transferred to other states if the flag state decides to tighten its enforcement (Hunter et al. 1998).

Increased port state controls are a response to some of the problems created by flags of convenience. Regional agreements provide for more stringent enforcement of such port state controls (McDorman 2000). Port state jurisdiction differs from coastal state jurisdiction in that it applies only if the state's sole connection with the incident is the delinquent vessel's presence. Port state jurisdiction allows for stricter enforcement of regulations than may be provided by the flag state, but it also interferes less than the broader coastal state jurisdiction, as there is rarely any interference with the navigation and "innocent passage" of the ship. Any investigation performed by a port state is an investigation of the flag state's law, not the port state's. Thus, upon finding a violation, the port or coastal state must pass along the information to the flag state, unless the violation occurs within the territorial sea of the state (Hunter et al. 1998).

Under MARPOL, both port and coastal states are given the authority to inspect ships within their port or territory. Extensive inspections may be made of ships without IOPP certificates, but ships with the certificates may only be inspected if there are clear grounds for the state to believe that the ship is not in compliance with the certificate (MARPOL Article 5). Port and coastal states also have the authority to detain a ship if the inspection uncovers violations. When this occurs, shipowners often promise to make the repairs elsewhere, and the states often allow the ship to continue on its way (Hunter et al. 1998).

The bulk of enforcement authority under MARPOL lies with the flag state. Any

enforcement proceedings in the flag state will preempt proceedings in the port or coastal state. It is for this reason that critics argue that shipowners will tend to register in flag states with lax enforcement records. However, the flag state's authority does not preempt that of the port or coastal state if the discharge caused major damage to the port or coastal state, or if the flag state has a record of nonenforcement. UNCLOS does provide that, upon the conclusion of proceedings in a flag state, any suspended proceedings in another state will be terminated (Keselj 1999).

According to Hunter et al. (1998), there are steps that could be taken to improve the reporting of flag states. Sanctions could be placed on flag states for failure to comply with the reporting requirements of MARPOL Article 6. Alternatively, the port or coastal state that discovered the violation could be given broader powers to continue proceedings relating to the violation. At present, once a flag state decides not to continue proceedings, the suspended proceedings in the port or coastal state terminate. Allowing the port or coastal state to have more recourse would encourage the flag state to more adequately address violations brought to its attention.

To further help solve flag-of-convenience problems, the IMO could publish a list of flag states that have documented how they comply with relevant vessel navigation safety conventions, similar to the requirements in the recently revised 1978 International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW Convention), discussed next (Quirk 1999). This would help all interested parties, including charterers, cargo owners, and brokers (Lodwick 1998), to obtain information about the quality of a flag nation's administration (Li and Wonham 1999).

Other conventions relevant to prevention of New Carissa–type incidents include the STCW Convention and its 1995 Protocol, both of which have come into force with the United States as a party (McCarter 1999). They set qualification standards for vessel masters, officers, and watchkeepers on seagoing merchant ships, including tankers (62 Fed. Reg. 34,506 (1997)). The standards cover training for safety and emergency duties and minimum rest periods for watchkeepers. The United States Supreme Court, in its Intertanko decision (discussed below), noted the STCW Convention as one of several treaties to which the United States is a party and which, under the U.S. Constitution's Supremacy Clause, can preempt conflicting state laws intended to prevent New Carissa–type incidents.

The 1974 International Convention for the Safety of Life at Sea (SOLAS Convention), which has entered into force with the United States as a party, has been

supplemented by the 1994 International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code), which is entering into force in stages (Allen 1999). The ISM Code became mandatory for vessels in excess of five hundred gross tons, like the New Carissa, on July 1, 1998. The code's standards provide a basis for defeating a shipowner's limitation of liability where the owner did not attend to defects and maintenance needs that were observed by the vessel's crew. The SOLAS Convention also has been supplemented by a 1997 amendment, which has gone into force pursuant to the convention's innovative tacit amendment procedure that makes amendments binding on all parties except those which have formally objected. The United States has not objected to this 1997 amendment, which establishes procedures for IMO review of mandatory vessel routing systems adopted by a party or group of parties to the convention (IMO Resolution MSC.46(65)) such as the proposed West Coast Offshore Vessel Traffic Risk Management Scheme discussed below. The SOLAS Convention was the first international agreement to include requirements for double bottoms (as distinguished from double hulls) on some vessels.

The United States is also a party to the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (Intervention Convention) and its 1973 Protocol, both of which are in force. Under the Intervention Convention and the 1973 Protocol, the United States may intervene in a high seas accident that occurs beyond the twelve-nautical-mile territorial sea limit "to prevent, mitigate, or eliminate grave and imminent danger" to the U.S. coastline (Article I(1)) from pollution by oil or other hazardous substances such as a vessel collision or stranding involving either tankers or non-tankers like the New Carissa. UNCLOS Article 221, which is considered by some to be customary international law, does not require that the danger be "grave and imminent," and it allows the coastal nation the right to take any measures proportionate to the actual or threatened damage from any type of pollution from a maritime casualty involving any type of vessel. The 1969 Intervention Convention is implemented by the federal Intervention on the High Seas Act of 1974 (33 U.S.C. §§ 1471–1487). The act authorizes expenditures from the Oil Spill Liability Trust Fund created by OPA (discussed below) to eliminate pollution threats covered by the act (33 U.S.C. § 1486).

Vessel collisions have accounted for several major oil spills from both tankers and non-tankers like the New Carissa. To reduce collisions, the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) (28 U.S.T. 3459, 1143 U.N.T.S. 346) establishes international navigation rules of the road at sea. The convention is in force and the United States is a party (28 U.S.T. 3460; see 33 U.S.C. § 1602). These international navigation rules apply to all vessels navigating within the U.S. territorial sea but outside designated coastal pilot grounds. For navigation within

coastal pilot grounds, bays, estuaries, ports, and other inland waters of the United States, federal inland navigation (33 U.S.C. §§ 2001–2038) and pilot (33 C.F.R. § 82.01 et seq.) rules have been enacted. Any state navigation rule also is binding as long as it does not conflict with a federal rule (Schoenbaum 1994).

Tanker-Oriented Treaties and the Federal Oil Pollution Act

While the focus of this report is on spills from non-tankers like the New Carissa, it is worth noting that the United States is not a party to two of the major conventions imposing strict liability and liability limits on, and establishing spill compensation funds funded by, oil tanker owners and the owners of the cargo their tankers carry, i.e., oil companies who import oil (Ozcayir 2000). Instead, the federal OPA (33 U.S.C. § 2701 et seq.) establishes much higher liability limits for tanker spills, including unlimited liability for "gross" negligence, which is often found to be involved (see Tug Ocean Prince v. United States, 584 F.2d 1151 (2d Cir. 1978), cert. denied, 440 U.S. 959 (1979)). The act also covers spills from non-tankers (Smelley 1999–2000). For example, the owners of a bulk carrier which grounded in Alaska's Shumagin Islands and threatened to spill its over two hundred thousand gallons of bunker fuel oil were held liable for the Coast Guard's over $1.5 million in costs for standing by for eleven days before the vessel was successfully refloated. See United States v. Hyundai Merchant Marine Co., 172 F.3d 1187 (9th Cir. 1999), cert. denied, 120 S. Ct. 397 (1999). For a 1996 oil spill in Rhode Island waters, the owner, operator, and insurer of the barge North Cape recently agreed to restock 1.24 million lobsters and pay $8 million to restore other damaged natural resources. However, based on his experiences in the New Carissa incident, the Coast Guard officer serving as the incident's Federal On Scene Coordinator has recommended that (1) Congress raise OPA's liability limits (discussed below in more detail with Oregon's liability rules), especially for non-tankers; and (2) in the interim, the limits be administratively adjusted based on the consumer price index pursuant to OPA section 1004(d)(4) (codified at 33 U.S.C. § 2704(d)(4)) (Hall 1999). Congress also should make corresponding changes in CWA section 311(f)'s limits on responsible party liability for response costs, including restoration costs (codified at 33 U.S.C. § 1321(f)). Additional OPA provisions relevant to non-tanker spills are discussed below in connection with state spill prevention, response, and liability laws.

Most of the controversy about OPA involved its phased-in requirements of double hulls on tankers that exceeded governing international tanker design standards at the time of OPA's enactment in 1990. However, MARPOL was amended in 1992 to require double hulls, and a 1992 Protocol was adopted, significantly increasing the compensation available to those injured by tanker oil spills (Hunter et al. 1998). The

1992 Protocol is in force, but the United States is not a party. Also, because of OPA's broad definitions of compensable damages, the Comité Maritime International (CMI) developed voluntary international guidelines for oil pollution damage claims presented in national courts, with particular attention to the economic loss question discussed below. See CMI Guidelines on Oil Pollution Damage (1994).

The *Intertanko* Decision

The U.S. Supreme Court's March 6, 2000, decision in United States v. Locke, 120 S. Ct. 1135 (2000), known as the Intertanko case, interprets those federal laws that implement the above treaties as leaving relatively little room for state regulation of domestic and foreign-flag vessels (especially tankers) engaged in interstate and foreign commerce. In particular, the Court interpreted the federal PWSA (33 U.S.C. § 1221 et seq.) as generally limiting state regulation of navigation safety "to local circumstances and problems, such as water depth and narrowness, idiosyncratic to a particular port or waterway." A state regulation is most likely to be upheld if "the regulation is based on the peculiarities of local waters that call for special precautionary measures." State regulations that are valid also will tend to be those that "pose a minimal risk of innocent noncompliance, [that] do not affect vessel operations outside the . . . [state], [that] do not require adjustment of systemic aspects of the vessel, and [that] do not impose a substantial burden on the vessel's operation within the . . . [state]."

With respect to tankers, "only the Federal Government may regulate the[ir] design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning. . . ." The Court felt that Congress did not intend to allow coastal states "to impose wide-ranging regulation of the at-sea operation of tankers." Even for non-tank vessels like the New Carissa engaged in interstate and foreign commerce, the state regulatory role with respect to the matters just listed above is relatively small under current treaties to which the United States is a party and the federal statutes and regulations that implement them.

Specific proposed changes in Oregon law that do not violate the limits on state regulation identified in Intertanko and that are intended to help prevent future New Carissa–type incidents in Oregon waters are included in this report. As distinguished from vessel design, construction, and operation, the Court recognized that Congress did intend the states to have a significant role additional to the federal government in "imposing liability for pollution caused by oil spills." Thus, this report includes recommendations for strengthening Oregon oil spill liability law so as to meet the requirements of Congress and the U.S. Supreme Court.

The Court, in Intertanko, underemphasized Congress' role in controlling preemption questions through express statutory language (Weiland 2000). If Congress feels that the Court has misinterpreted congressional intent with respect to the state regulatory role, Congress may redefine the state role with appropriate statutory amendments, recognizing that some amendments could also require the negotiation of changes in treaty language. This report includes recommended amendments to relevant federal legislation authorizing a broader state role than that identified by the Court in Intertanko (e.g., along the lines of H.R. 4385, introduced in the 106th Congress by Washington Congressman Jack Metcalf).

A broader state role is justified because marine pollution prevention, response, and liability laws lie at the intersection of environmental and maritime law (Nixon et al. 1999; Ringbom 1997). Federal environmental statutes such as OPA typically delegate significant responsibility to the states and authorize them to enforce pollution control requirements that are more stringent than federal rules. Maritime law, Intertanko, and the Court's decision in Ray v. ARCO (435 U.S. 151 (1978)) use traditional concerns for national and international uniformity, often reflected in Coast Guard regulations issued under OPA and the PWSA, in order to undercut state marine pollution control roles accepted by Congress. After Ray invalidated several Washington State tanker navigation rules designed to protect Puget Sound water quality and natural resources, Congress promptly enacted similar rules as federal law not subject to preemption (33 U.S.C. § 476).

Pending such a specific or more general congressional reaction to Intertanko, states legislating on marine pollution control issues can reduce preemption conflicts, especially with Coast Guard regulations, by including statutory language repealing state provisions covering issues for which comparable federal rules subsequently are adopted. Preexisting state approaches can significantly affect the substantive content of subsequently adopted federal rules, as illustrated by the Coast Guard's adoption of Washington State's maximum size limit on tankers entering Puget Sound, held preempted in Ray (44 Fed. Reg. 36,174 (1979)); Rhode Island's barge-anchoring system requirements (63 Fed. Reg. 71,756 (1998)); and minimum underkeel clearance rules for single-hulled tankers that are quite deferential to local port requirements (Lunday and Darmody 1998).

A bolder state approach to avoiding preemption that is worthy of further study would be to couple the Court's approval in Intertanko and Ray of Washington's tug escort requirement for tankers without certain design features with OPA's clear protection from preemption of state laws that impose "additional liability or requirements" relating to "the discharge of oil or other pollution by oil" or a

"substantial threat" of a discharge within the state (33 U.S.C. § 2718(1)(a) and (2)(c)). State tanker design requirements, standing alone, clearly are preempted under Intertanko and Ray, while state liability rules (such as a state statute imposing strict unlimited liability for spilling oil) clearly are not. A state statute that creates an incentive for compliance with otherwise preempted requirements, by limiting the liability under state law of vessels meeting those requirements, also may not be preempted (Peterson 1999).

In Intertanko, the Court invalidated Washington State regulations regarding navigation watch procedures, English language skills, crew training, and vessel accident and casualty reporting. The Ninth Circuit Court of Appeals previously had invalidated Washington State regulations requiring tankers to install certain navigation and towing equipment (148 F.3d 1053 (9th Cir. 1998)). Under the Supreme Court's opinion, the validity of eleven other sets of Washington tanker regulations dealing with tanker operating procedures, personnel policies, management practices, and twenty-four hours' advance notice of entry into state waters (including notice of any conditions that pose a hazard to the vessel or the marine environment) was to be reviewed under the principles established in Intertanko by the lower federal courts on remand (216 F.3d 880 (9th Cir. 2000)). With respect to their validity, the Court did state that the United States and the International Association of Independent Tanker Owners (Intertanko) had made "substantial arguments" that these remaining regulations were invalid as well.

In response, in August 2000, the Washington State Department of Ecology (DOE) repealed both the remanded and the previously invalidated rules and terminated its inspections of tankers and oil-carrying barges in the Columbia River. Furthermore, the Washington State legislature terminated the DOE's Office of Marine Safety, which had administered the repealed rules (2000 Wash. S.S.B. No. 6210). The state's rules for barges are to be reviewed by the DOE. Paul Slyman, administrator of Oregon's spill cleanup program in the DEQ, has stated that Oregon would continue to rely on Coast Guard tanker inspections rather than institute its own inspections.

Washington's now repealed twenty-four-hour advance notification requirement was similar to proposed legislation, discussed below, that was introduced in the 1999 Oregon legislature but not enacted, as well as to the previously discussed proposed federal legislation introduced during the 106th Congress by Oregon Congressman Peter DeFazio and Senator Ron Wyden in response to the New Carissa incident. As federal legislation, DeFazio's and Wyden's proposals would not be constrained by the Court's Intertanko opinion; compatibility with relevant treaties was discussed above.

The validity of state-required vessel spill contingency plans was not at issue in

the Intertanko case. Such plans would seem to be valid unless a regulation of the specific type struck down in Intertanko was imposed by the state as part of the plan requirements. Even then, only those specific parts of the plan would be invalid, not the whole plan. Obviously, under Intertanko, the more consistency between the state and federal plan requirements discussed below, and the international requirements discussed above, the better.

The Court's analysis, in Intertanko, of appropriate state roles was based on whether the navigation safety issue of concern was covered by PWSA Title I or Title II (or both). Title I authorizes, but does not require, the Coast Guard to enact measures for controlling vessel traffic and for protecting navigation and the marine environment. Title II requires the Coast Guard to issue regulations addressing the design, construction, alteration, repair, maintenance, operation, equipping, personnel qualifications, and manning of tankers and related vessels. Title II regulations are intended to protect life and property, increase vessel navigation safety, and protect the marine environment and, thus to some extent, overlap Title I regulations. For Title I matters, a "conflict preemption" approach applies, i.e., a state regulation is invalid only where compliance with both state and federal law is impossible, or when the state law stands as an obstacle to the accomplishment and execution of congressional objectives. However, with respect to tankers and related vessels covered by Title II, "field preemption" applies, i.e., Congress has occupied the field and completely excluded state regulation of the Title II topics related to tanker design, construction, and operation listed above.

With respect to issues on which Title I and Title II overlap, the Court indicated that Title II field preemption would not be applied to state regulations that are justified by conditions unique to a particular port or waterway and that are of limited extraterritorial effect (i.e., not requiring a tanker to modify its primary conduct outside the specific body of water purported to justify the local rule), that pose a minimal risk of innocent noncompliance, that do not require adjustment of the systemic aspects of the tanker, and that do not impose a substantial burden on the tanker's operation within the port or waterway. As examples, the Court pointed to Washington State rules requiring the use of tug escorts and local pilots on certain tankers navigating in Puget Sound—rules which the Court previously had upheld in Ray v. ARCO. Even though they may survive field preemption under Title II, such state regulations remain subject to conflict preemption under Title I, as illustrated in the Ray case, in which the Court invalidated the part of Washington's local pilot requirement that directly conflicted with federal pilot requirements.

In theory, field preemption under Title II is limited to state regulation of tankers and other bulk cargo vessels that carry oil, hazardous substances, or inflammable or

combustible liquids, leaving a role for state regulation of non-tankers on the matters covered for tankers by Title II. However, even for non-tankers, states such as Oregon would be well advised to follow the Court's guidelines for valid state regulations discussed above. In Intertanko, the Court acknowledged that state laws in fields traditionally regulated by the states benefit from a presumption of non-preemption, but it then stated:

> The state laws now in question bear upon national and international maritime commerce, and in this area there is no beginning assumption that concurrent regulation by the State is a valid exercise of its police powers. Rather, we must ask whether the local laws in question are consistent with the federal statutory structure, which has as one of its objectives a uniformity of regulation for maritime commerce.

In this connection, the Court acknowledged "the historic role of the states to regulate local ports and waters" as a role which PWSA Title I does preserve. Cooley v. Board of Wardens of Port of Philadelphia, 53 U.S. 299 (1851), is cited by the Court for that proposition in Intertanko. However, the Court notes that Cooley also stated that there would be instances in which state regulation of maritime commerce is inappropriate even in the absence of express federal rules that conflict with a state regulation or occupy the field to the exclusion of state regulation. Thus, Intertanko and Cooley suggest that state regulations for non-tank vessels should be carefully circumscribed to minimize their intrusion on patterns of uniformity in maritime commerce and be based on special conditions prevailing in local ports and waterways.

Oregon Navigation Safety, Spill Response, Liability, and Wreck Removal Law

Current Oregon law applicable to the New Carissa and related incidents conforms to the requirements of the Supreme Court's Intertanko decision. After briefly reviewing existing Oregon law, this section recommends changes with respect to conformity with the Intertanko decision aimed at preventing future New Carissa incidents, improving state and local government responses to such incidents, and strengthening Oregon's liability rules applicable to such incidents.

A. Prevention

1. State Pilot Requirements

In conformity with federal law, as interpreted in Intertanko, Oregon law requires vessels engaged in foreign trade, both American flag ("registered") and foreign flag,

to utilize state-licensed pilots when navigating in the statutorily designated pilot grounds of the Columbia and Willamette rivers, Coos Bay, and Yaquina Bay (ORS § 776.015 et seq.). Special conditions are attached to pilot requirements on the Columbia River. The Columbia's status as a boundary water between states brings it under federal regulations that allow pilots from either bordering state to pilot vessels to any port or destination on that portion of the river that serves as a boundary, regardless of the state in which the destination is located (46 U.S.C. § 8501(b)). Upon entry into the Willamette River, use of an Oregon-licensed pilot can be and is required. See The Glenearne, 7 F. 604 (D. Or. 1881).

Pilot requirements for vessels engaged in domestic ("coastwise") trade currently are established by federal law. One of this report's recommendations for changes in federal law is that Congress consider amending federal law to subject vessels engaged in domestic trade to state pilot requirements as well.

Currently, under ORS section 776.405(2), pilots are viewed as advisors to the vessel master, who has ultimate control (New Carissa Review Committee 2000). If Oregon law is changed, as recommended, to place pilots in complete charge of the vessel's navigation, additional legislation to immunize pilots from liability also should be considered and the need for accompanying changes in federal legislation researched. In states such as Oregon, where the use of pilots is mandatory for certain vessels navigating in certain areas, federal court decisions disagree as to whether negligence by the pilot releases the vessel owner from liability. Compare Burgess v. M/V *Tamano*, 564 F.2d 964 (1st Cir. 1977), with California v. Italian Motorship Ilice, 534 F.2d 836 (9th Cir. 1976).

As a foreign-flag vessel planning to enter Coos Bay, the New Carissa was required to use a state-licensed pilot, but, unfortunately, it ran aground before a pilot could go on board. After it ran aground a pilot did board and attempted to back the New Carissa off the beach, but with no success.

In response to the New Carissa incident, two bills (H.B. 3601 and S.B. 1305) were introduced during the 1999 Oregon legislative session, but they were not enacted. These bills would have required most foreign- and American-flag vessels to use state-licensed pilots when navigating within three miles of the Oregon coast. S.B. 1305, in addition, would have required covered vessels headed for an Oregon pilot ground to notify the relevant pilot's organization while the vessels were still at least twelve nautical miles away from the ground. The geographic breadth of such requirements could lead a federal court to invalidate them, unless Congress also amended federal law to explicitly authorize such geographically broad state pilot requirements (Good et al. 1987).

2. Tug Escorts

A preventative approach authorized by federal law but not currently utilized by Oregon is mandatory tug escorts for vessels over a certain size navigating in waters or under conditions posing above average risk of an accident. In Intertanko, the Court specifically approved Washington's tug escort requirement for large tankers navigating in Puget Sound. Further study might show that tug escorts could play a useful role at reasonable cost in preventing large vessel groundings and collisions in and near Oregon's relatively constricted waterways of commercial significance. Whether the entrance channels to Coos and Yaquina bays are too small for the beneficial use of tug escorts, at least within the channel itself, would have to be very closely studied.

As a backup to other preventative measures in Washington, from December 1999 to June 2000, the tug Barbara Foss was stationed as a dedicated rescue tug at Neah Bay on Washington's Olympic Peninsula for quick access to the one-hundred-mile-long Strait of Juan de Fuca, where it did in fact assist three vessels. State and federal agencies shared the $8,500 daily cost of keeping the tug there. The 1999 Washington legislature appropriated $1,650,000 to the state's oil spill response agency, the DOE, for stationing the tug again at Neah Bay from October 2000 through January 2001 (1999 Wash. H.B. No. 2487). A report from the DOE on the tug's activities is due December 1, 2000.

3. Vessel Routing

The States/British Columbia Oil Spill Task Force, headquartered in Portland, Oregon, is playing an active role in the development of a West Coast Offshore Vessel Traffic Risk Management Scheme, portions of which ultimately may be forwarded to the IMO. If approved, the scheme would show on international charts and tell all vessel traffic types where they are expected to be in the navigation traffic schemes adopted for particularly sensitive offshore areas of the West Coast, including the waters of designated national marine sanctuaries (Luster 1999; Spadi 2000). In May 2000 the IMO approved shipping lanes for large vessels through the Channel Islands, Gulf of the Farallones, and Monterey Bay national marine sanctuaries off California (Phillips 2000).

A model for the ongoing Canadian and U.S. cooperation in this effort (Savage 1998) is the 1979 Agreement for Cooperative Vessel Traffic Management System for the Juan de Fuca Region (32 U.S.T. 377, T.I.A.S. No. 9706). Such transboundary vessel pollution prevention schemes and agreements further the environmental

protection goals of the January 2000 Canadian and U.S. environment ministers' Joint Statement of Cooperation on the Georgia Basin and Puget Sound Ecosystem. Also in May 2000, President Clinton issued Executive Order No. 13,158 (65 Fed. Reg. 34,909 (2000)), instructing federal agencies to use their existing statutory authority to expand and protect local, state, and federal marine protected areas (MPAs) such as national marine sanctuaries. The agencies were ordered to identify "emerging threats" to MPAs such as spills from vessels and to "avoid harm to the natural and cultural resources that are protected by an MPA" through "federally conducted, approved, or funded activities" such as commercial navigation. For these and other reasons, the Oregon Ocean Policy Advisory Council may want to recommend to the governor and the legislature that the state support designation of state and federal marine protected areas in important Oregon offshore areas such as Heceta-Stonewall Banks.

B. Spill Response and Liability

As the Court in Intertanko recognized, Congress has specifically authorized the states to impose additional liability and other requirements with respect to the "discharge, or substantial threat of a discharge of oil" beyond those imposed by Congress in OPA (33 U.S.C. § 2701 et seq.) (Beaver et al. 1994). Relevant Oregon statutes (ORS § 468B.300 et seq.) and regulations cover both tankers and non-tankers and include spill response plan requirements coordinated with Washington State and the federal government (Oregon Administrative Rules (OAR) 340-047-0170) as well as strict liability for private and public damages, including cleanup and removal costs (OAR 340-108-0001 et seq.).

Oregon's statute (ORS § 468B.310) imposing strict liability for oil spill damages to persons and public or private property is protected from preemption by OPA section 1018(a) and (c) as interpreted by Intertanko. Intertanko cited, with approval, the Court's earlier opinion in Askew v. American Waterways Operators, Inc., 411 U.S. 325 (1973), which upheld a similar Florida strict liability statute against preemption claims based on pre-OPA federal law. However, the 2001 Oregon legislature could usefully broaden ORS section 468B.310 to include liability for economic losses caused by a spill that are not connected to physical injuries to persons or property, e.g., lost income or diminished profits resulting from oil spill damage to natural resources suffered by persons engaged in commercial fishing, processing, or aquaculture operations such as oyster growing. Several Coos Bay oyster growers testified to the state's New Carissa Review Committee about their uncompensated losses over and above any amounts which had been offered by representatives of the responsible party to settle their claims.

Similar Rhode Island provisions imposing liability for economic losses were upheld by the First Circuit Court of Appeals in Ballard Shipping Co. v. Beach Shellfish, 32 F.3d 623 (1st Cir. 1994), citing OPA section 1002(b)(2)(E), which imposes liability on oil spillers for "damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of real property, personal property, or natural resources. . . ." While double recoveries for the same losses should not be allowed under federal and state law, the Ballard court felt that parallel state economic loss recovery laws like the Rhode Island provisions were not preempted by section 1002 because of their specific protection from preemption under OPA section 1018(a) and (c), which authorize the states to impose "additional liability" for the discharge of oil. The words "additional liability" suggest that state law economic recovery provisions that are broader than those in OPA section 1002 are valid as well. Those words also may validate laws like New Hampshire's (N.H. Rev. Stat. Ann. § 146-A:10), which allow parties injured by oil spills to recover 150 percent of the damages they suffer.

Where economic losses are suffered in vessel groundings not involving the spilling of oil, OPA's economic loss provisions and OPA's authorization of state economic loss provisions do not apply. In such cases, federal maritime law continues to limit economic loss recoveries to commercial fishermen under the Supreme Court's 1927 decision in Robins Dry Dock and Repair Co. v. Flint, 275 U.S. 303 (1927), and the Ninth Circuit Court of Appeal's decision in Union Oil Co. v. Oppen, 501 F.2d 558 (9th Cir. 1974), which arose out of the 1969 Santa Barbara oil spill. This is illustrated by a more recent decision preempting the application of a state strict liability statute for damages to an oyster bed caused by a barge grounding not involving spilled oil. See Maryland Dep't of Natural Resources v. Kellum, 51 F.3d 1220 (4th Cir. 1995).

Also needed are improvements to Oregon's procedures and data used in assessing spill damages. The scarcity of baseline data on individual species makes it difficult to determine what the losses to various species are in a New Carissa–type incident. Some states have detailed schedules assigning dollar values to species and their habitat (Fla. Stat. ch. 376.121(5), (6)), which then can be used to calculate damages based on the actual and estimated numbers lost in each category. Louisiana Sea Grant's Legal Advisory Services recently reviewed, and suggested changes to, Louisiana's natural resource damage assessment regulations.

Unlike some states, the Oregon legislature has not yet established an oil spill damages compensation fund funded with fees or taxes imposed on the various sectors of the petroleum industry operating in Oregon, e.g., on a per barrel basis (Cal. Gov't Code § 8670.40; Fla. Stat. ch. 206.9935; Haw. Rev. Stat. § 243-3.5; Md. Code Ann., Env't § 4-411; N.J. Stat. Ann. § 58:10-23.11h; N.Y. Nav. Law art. 12, § 174; R.I.

Gen. Laws § 46-12.7-4.1; Tex. Nat. Res. Code Ann. § 40.155; Wash. Rev. Code § 82.23B.020)) or a per gallon basis (N.H. Rev. Stat. Ann. § 146-A:11-b). Such funds can be used to reimburse private (R.I. Gen. Laws § 46-12.7-10; N.J. Stat. Ann. § 58:10-23.11g; N.Y. Nav. Law art. 12, § 181; Tex. Nat. Res. Code Ann. § 40.152(a)(3)) and public costs and damages suffered in a spill incident (Chalos 1999). Claims that are paid from the fund then become the basis for claims by the state against the responsible party (Cal. Gov't Code §§ 8574.41, 8670.51; Fla. Stat. ch. 376.123; N.J. Stat. Ann. § 58.10-23.11q; N.Y. Nav. Law art. 12, § 181; Tex. Nat. Res. Code Ann. § 40.160(d)). The 2001 Oregon legislature should seriously consider establishing such a fund modeled on the funds established by states such as California (Cal. Gov't Code §§ 8670.46–8670.53.95) and Maine (Me. Rev. Stat. Ann. tit. 38, § 551) together with the other improvements recommended below. Evidence presented to the governor's New Carissa Review Committee by Coos Bay oyster growers and other injured parties demonstrated a need for such a fund to reimburse the legitimate claims of injured parties who were not able to settle with the responsible party.

The validity of such state funds is specifically preserved by OPA section 1018(b) (codified at 33 U.S.C. § 2718(b)), which states that OPA is not intended to affect in any way the authority of a state "(1) to establish, or to continue in effect, a fund any purpose of which is to pay for costs or damages arising out of, or directly resulting from, oil pollution or the substantial threat of oil pollution; or (2) to require any person to contribute to such a fund." Paralleling OPA's financial assurance requirements (33 U.S.C. §§ 2704(a), 2716(a)) for tankers over three hundred gross tons, Oregon requires evidence of financial assurance of $1,200 per gross ton (ORS § 468B.390(3)(a)); this financial assurance is intended to meet any liability to the state for oil spill removal costs, any civil penalties and fines imposed in connection with a spill, and natural resource damages (ORS § 468B.480). Any civil penalties that are collected are placed in the state's Oil Spillage Control Fund, to be used by the state DEQ for costs incurred in carrying out spill cleanup activities and rehabilitating affected fish and wildlife (ORS § 468B.455). In addition, OPA authorizes the states to enforce that act's financial responsibility requirements on the state's navigable waters (33 U.S.C. § 2719); Oregon has done this, but for tankers only, through ORS sections 468B.475–468B.490. These sections should be amended to include non-tankers as well.

However, as under OPA, non-tankers over three hundred gross tons, like the New Carissa, navigating in Oregon waters are only required to have financial assurance of $600 per gross ton (ORS § 468B.390(3)(b)). Thus, in addition to the public and private damages fund recommended above, the 2001 Oregon legislature should increase the state's financial assurance requirements for non-tanker vessels over three hundred gross tons and amend ORS section 468B.480 to authorize use of

the required financial assurance to reimburse the state for damage claims paid out of the fund. For example, California requires non-tankers over three hundred gross tons to provide evidence of financial responsibility to pay at least $300 million for damages caused by spills (Cal. Gov't Code § 8670.32(i)). Cargo barges that carry no fuel, oil, or other hazardous substances could be excepted from any increase.

Another improvement to Oregon oil spill response law regarding non-tankers would be to extend the geographic coverage of statutorily required contingency plans to the open coast between ports, where spills can result from groundings such as the New Carissa's. Such a geographic extension could be accomplished administratively by the Oregon DEQ under its existing statutory authority to require contingency plans contained in ORS sections 468B.340–468B.425.

Even better would be amendments to federal CWA section 311(j)(5) (codified at 33 U.S.C. § 1321(j)(5)) requiring non-tankers over three hundred gross tons to have oil spill contingency plans covering the U.S. twelve-nautical-mile-wide territorial sea as well as port areas which are coordinated with similar Canadian requirements. For the Pacific Coast states and British Columbia, actions on the above recommendations could be coordinated through the States/British Columbia Oil Spill Task Force. In California, non-tankers must participate in a statewide spill response plan, with the geographic coverage of each vessel's individual response plan varying, based on regulations issued under California Government Code section 8670.32.

Like Oregon, Washington recently extended its contingency plan requirements to non-tankers over three hundred gross tons (Wash. Rev. Code § 88.46.060), but it also enacted inspection (Wash. Rev. Code § 88.46.050) and incident notification (Wash. Rev. Code § 88.46.100) requirements applicable to such vessels. In addition, the Alaska Department of Environmental Conservation is seeking legislative authority to require oil spill contingency plans for non-tankers navigating in Alaska waters.

C. Wreck Removal

Wreck removal costs, as distinguished from spill response costs, for a grounded vessel like the New Carissa apparently are not a reimbursable cost under the OPA Oil Spill Liability Trust Fund (Hall 1999). The ensuing dispute between the state of Oregon and the New Carissa's representatives over removal of the remaining portion of the stern from the beach at Coos Bay illustrates the need for the 2001 Oregon legislature to enact state wreck removal legislation. At a minimum, vessel owners should be made statutorily liable for wreck removal expenses, and ORS section 468B.480(2) should be amended to expressly include "wreck removal expenses" within a vessel's financial assurance required by ORS section 468B.480(1),

as recommended by the New Carissa Review Committee. More comprehensive legislation could be modeled on the wreck removal statutes of Alaska (Alaska Stat. §§ 30.30.010–.150), Massachusetts (Mass. Ann. Laws ch. 91, §§ 38–49), and Mississippi (2000 Miss. S.B. No. 2598). For example, in Mississippi, vessel owners and operators are liable for double the costs of wreck removal and environmental restoration.

The validity of state wreck removal legislation was not at issue in the Intertanko case. Furthermore, OPA section 1018(a)(1)(B) authorizes a state to impose "additional liability or requirements with respect to . . . any removal activities in connection with" a vessel oil discharge. Under section 1018(b)(1), quoted below, it appears that the state could impose strict liability on responsible parties for wreck removal expenses (Tex. Nat. Res. Code Ann. § 40.108(b)), including environmental damages and restoration costs, and establish a wreck removal fund (La. Rev. Stat. Ann. §§ 30:2469, :2483; 2000 Miss. S.B. No. 2598) supported by fees assessed against vessels navigating in state waters, in addition to the state spill damages fund recommended above and other financial responsibility requirements.

Specifically, OPA recognizes the authority of the states "to establish . . . a fund any purpose of which is to pay for costs or damages arising out of, or directly resulting from, oil pollution or the substantial threat of oil pollution" (section 1018(b)(1)) and "to require any person to contribute to such a fund" (section 1018(b)(2)). One of the continuing risks posed by the portion of the New Carissa's stern remaining on the beach is the possibility of oil spilling from its forward fuel tank.

If OPA section 1018(a), quoted in part above, applies to state wreck removal statutes, then, by its express language, it also protects those statutes from preemption by the 1851 federal Limitation of Liability Act (46 U.S.C. app. § 183). When applicable, the Limitation of Liability Act can limit vessel owner liability to the value of a vessel at the end of the voyage, which, in the case of wrecks like the New Carissa, can be minimal (Allen 2000). See Metlife Capital Corp. v. M/V *Emily S.*, 132 F.3d 818 (1st Cir. 1997), cert. denied, 524 U.S. 952 (1998). In the aftermath of the infamous 1967 Torrey Canyon spill, the tanker owner successfully invoked the 1851 act to limit its liability to $50.

Federal statutes besides OPA that are relevant to wreck removal also appear to allow additional state legislation on the subject. Most fundamentally, the federal Submerged Lands Act (43 U.S.C. § 1301 et seq.) assigns ownership of the seabed three nautical miles seaward to coastal states like Oregon. In managing seabed lands and the beds of adjacent bays and estuaries, the coastal states act as trustees for the public under the public trust doctrine (Hildreth 1993). The mean high tide line

generally defines the inland extent of state ownership and public trust responsibilities for coastal seabeds and the beds of coastal bays and estuaries. In Oregon, the state also manages sandy shorelines from the mean high tide line further inland to the vegetation line to protect the public's judicially recognized rights to use that zone free from interference from the owners of adjacent uplands. See Stevens v. City of Cannon Beach, 317 Or. 131, 854 P.2d 449 (1993), cert. denied with dissenting opinion, 510 U.S. 1207 (1994). The state's strong legal position as landowner, land manager, and trustee for the public provides a firm foundation for state wreck removal legislation imposing financial responsibility requirements and damages liability on parties responsible for a shipwreck's temporarily or permanently occupying state-owned or state-managed lands and waters. Such legislation primarily applies to "local" waters of the state in which a vessel wrecks. Under Intertanko, this local focus is an important factor supporting the legislation's validity against claims of federal preemption.

Under these principles, other relevant federal statutes such as the 1899 Wreck Act (33 U.S.C. § 409 et seq.) and the 1987 Abandoned Shipwreck Act (43 U.S.C. § 2101 et seq.) do not appear to preempt state wreck removal legislation. Under the federal Wreck Act, the vessel owner has a continuing obligation to remove the wreck as an obstruction to navigation and as a pollution threat. Geographically this obligation extends to coastal waters and shorelines, where the New Carissa twice grounded, as well as to inland waters. The owner's liability for wreck removal expenses is unlimited, and, if it has any value, the wrecked vessel is liable in rem for the expenses (Healy and Sharpe 1999). Under the principles of Intertanko, the federal Wreck Act does not appear to preempt state wreck removal legislation, but Congress should amend the act to specifically authorize state wreck removal legislation like that discussed above.

The IMO Legal Committee recently produced a draft Convention on Wreck Removal. Under the draft convention, when a wreck constitutes a hazard, the vessel owner is obligated to remove the wreck. If the owner does not remove the wreck promptly, a nation party to the convention may remove it and recover its expenses by sale of the wreck and through action against any insurers of the vessel (Healy and Sharpe 1999).

Summary of Recommendations

As discussed in detail above, this report's recommendations to the 2001 Oregon legislature are as follows:

1. Coordinate state legislative responses to the New Carissa incident with existing and future federal laws and regulations by including express statutory language providing that state requirements can be met by compliance with comparable federal requirements, if any, and repeal state provisions covering issues on which a directly conflicting federal rule subsequently is adopted.

2. On issues where current federal and international approaches are deemed to be inadequate, couple vessel compliance with state standards with specific limits on vessel liability in place of the otherwise applicable unlimited liability.

3. Enact legislation extending Oregon's pilotage grounds to include all of the ocean waters inside the state's boundary (three nautical miles offshore), placing pilots in complete charge of vessel navigation within that pilotage ground, and immunizing pilots from liability while performing their pilot duties, all in coordination with the related changes in federal law recommended in this report.

4. Mandate the use of tug escorts for vessels over a specific size navigating in waters or under conditions posing an above average risk of an accident, where studies show the risk would be significantly reduced by the use of tug escorts.

5. Broaden ORS section 468B.310 to include liability for economic losses caused by spills that are not connected to physical injuries to persons or property, e.g., lost income or diminished profits resulting from oil spill damage to natural resources relied upon by individuals and companies for income.

6. Establish an oil spill damages compensation fund funded with fees or taxes imposed on the various sectors of the petroleum industry operating in Oregon and modeled on similar funds established by other coastal states.

7. In addition to establishing the fund recommended above, increase the state's financial assurance requirements for cargo and passenger vessels over three hundred gross tons, amend ORS section 468B.480 to authorize use of the required financial assurance to reimburse the state for damage claims paid out of the fund, and amend ORS sections 468B.475–468B.485 to include non-tankers as well as tankers.

8. Mandate the geographic extension of statutorily required contingency plans for non-tankers to the open coast between ports where spills can result from groundings such as the New Carissa's, in coordination with the geographic expansions of regional contingency plans recommended by the States/British Columbia Oil Spill Task Force and similar changes in federal contingency plan requirements

recommended below.

9. Support an Oregon Ocean Policy Advisory Council study of the designation of state and federal marine protected areas in important Oregon offshore areas such as Heceta-Stonewall Bank, in coordination with regional and federal efforts to establish a West Coast Offshore Vessel Traffic Risk Management Scheme.

10. Support the preparation by the Oregon Department of Fish and Wildlife of detailed schedules assigning dollar values to all significant coastal flora and fauna, which can be used to calculate damages in vessel incidents.

11. Enact state wreck removal legislation to impose strict liability on vessel owners for removal and to establish a wreck removal fund supported by fees assessed against vessels navigating in state waters, in addition to the state spill damages fund recommended above and other financial responsibility requirements.

Pending legislative action, the Oregon DEQ, acting under its existing statutory authority, should administratively extend the geographic coverage of non-tanker spill contingency plans to the open coast between ports.

The report makes the following recommendations to the 107th Congress:

1. Ratify the 1996 Protocol to the 1972 London Dumping Convention through appropriate amendments to the Ocean Dumping Act, including a waiver of the Protocol's emergency exceptions.

2. Support the adoption and ratification of the IMO Convention on Compensation for Pollution from Ship's Bunkers, which would create a regime of compulsory insurance and direct action for bunker fuel spills (like the New Carissa's) that is compatible with the existing regime for oil tankers.

3. Ratify and implement the 1996 International Convention on Liability and Compensation of the Carriage by Sea of Hazardous and Noxious Substances, which would extend MARPOL to cargos other than oil.

4. Accede to the 1982 United Nations Convention on the Law of the Sea.

5. Enact section 203 of 1999 H.R. 820, which would deny entry into the U.S. territorial sea of vessels not in compliance with international safety and environmental protection standards and control operation of all vessels threatened by hazardous

circumstances with a mandate that regulations issued under section 203 be internationally disseminated through the IMO and coordinated with Canada and Mexico.

6. Enact amendments to U.S. vessel pollution laws such as the CWA, the Ocean Dumping Act, OPA, the PWSA, and the APPS to authorize their enforcement in the U.S. twelve-nautical-mile-wide contiguous zone that was proclaimed by President Bill Clinton in August 1999 and is adjacent to the territorial sea.

7. Amend the PWSA, in light of the United States Supreme Court's March 2000 Intertanko decision, to expressly authorize broader state roles in vessel pollution prevention than the Court recognized in Intertanko, e.g., by amending the PWSA to authorize state laws and regulations that do not directly conflict with federal regulations issued under that act.

8. Amend federal law to subject vessels engaged in domestic trade between U.S. ports, as well as those engaged in foreign trade, to state pilot requirements and to specifically authorize geographically broad state vessel anchoring and pilot requirements extending as far seaward as the state's boundary (generally three nautical miles offshore), including appropriate advance notification requirements.

9. Amend the federal CWA and OPA to raise liability limits and associated financial responsibility requirements and to require non-tankers over three hundred gross tons to have oil spill contingency plans covering the U.S. twelve-nautical-mile-wide territorial sea as well as port areas which are coordinated with similar Canadian requirements and also are coordinated regionally through such entities as the States/British Columbia Oil Spill Task Force.

10. Amend the federal Wreck Act to specifically authorize state wreck removal liability legislation.

11. Support the negotiation, adoption, and ratification of an IMO-administered Convention on Wreck Removal similar to the IMO Legal Committee's recent draft convention.

This report recommends that the Coast Guard and other federal agencies not only participate in the federal legislative and international treaty decisions recommended above and below, but also expand the successful enforcement efforts of MARPOL and the APPS against cruise ship violators to other vessels that violate those and related laws. This report also recommends that the national Commission on Ocean Policy, established by the federal Oceans Act of 2000, study the pollution

threats posed by non-tankers like the New Carissa and make further recommendations to Congress and the president regarding incident prevention and response.

This report's recommendations for international treaty negotiation and implementation include

1. adoption of the IMO draft Convention on Compensation for Pollution from Ship's Bunkers, recommended above for U.S. ratification;

2. IMO consideration of improvements to MARPOL, including amendments that would give port or coastal states that discover violations broader powers to maintain proceedings relating to those violations against offending vessels, sanction flag states for failure to comply with mandatory reporting requirements, and publish a list of flag states that have documented how they comply with relevant vessel navigation safety conventions;

3. adoption of the IMO Legal Committee's draft Convention on Wreck Removal, recommended above for U.S. ratification;

4. IMO approval, for inclusion on international charts, of relevant portions of the proposed West Coast Offshore Vessel Traffic Risk Management Scheme; and

5. adoption of any implementation recommendations generated by the IMO-coordinated review of sea disposal of vessels.

REFERENCES AND BIBLIOGRAPHY

Allen, Craig H. 1999. The ISM code and shipowner records: Shared safety goals vs. industry's privacy needs. University of San Francisco Maritime Law Journal 11:1–46.

Allen, Craig H. 2000. Limitation of liability. Journal of Maritime Law and Commerce 31:263–280.

Bateman, Sam. 1999. Australia's ocean policy and the maritime community. Maritime Studies, Sept.–Oct., 10–17.

Beaver, James E., et al. 1994. Stormy sea? Analysis of the new oil spill laws in

Alaska, California, Oregon, and Washington. Santa Clara Law Review 34:791–839.

Cameron, Jean R. 1999. Testimony presented March 24, 1999, to the Congress of the United States House of Representatives, Committee on Transportation and Infrastructure, Joint Hearing of the Subcommittee on Coast Guard and Maritime Transportation and the Subcommittee on Water Resources and the Environment.

Chalos, George M. 1999. A practical guide to the Oil Spill Liability Trust Fund claim submission procedures. University of Denver Water Law Review 3:80–93.

CMI guidelines on oil pollution damage. 1994. Adopted at the 35th International Conference of the Comité Maritime International (CMI), held in Sydney, October 2–8, 1994. Text available on the Internet: University of Cape Town, Faculty of Law, Marine & Shipping Law, Source Materials, CMI guidelines on oil pollution damage <http://www.uct.ac.za/depts/shiplaw/cmi/cmioil.htm> (accessed Oct. 10, 2000).

Coenen, René, Senior Technical Officer, International Maritime Organization. 1999. Letter to Matthew Mattson, University of Oregon Ocean and Coastal Law Center, Aug. 12 (see Appendix B for full text).

Corporations and the regulatory environment: New perspectives on compliance. 1999. Environmentally Friendly (Pace Center for Environmental Legal Studies) 2(2): 1–17.

Dickman, David G. 1999. Recent developments in the criminal enforcement of maritime environmental laws. Tulane Maritime Law Journal 24:1–54.

Duruigbo, Emeka. 2000. Reforming the international law and policy on marine or oil pollution. Journal of Maritime Law and Commerce 31:65–88.

Eymann, Katy, Chair, Oregon Marine Pilots Board. 2000. Letter to Oregon Secretary of State Bill Bradbury, June 2 (see Appendix D for full text).

Gilmour, T.H. 1999. Grounding of the M/V New Carissa, Lloyds No. L 8716136, off Coos Bay, Oregon, on 04 February 1999, with major pollution, no injuries or loss of life. Washington, D.C.: U.S. Department of Transportation, United States Coast Guard.

Good, James W., et al. 1987. Oregon territorial sea management study. Corvallis, OR: Oregon Sea Grant College Program, Oregon State University.

Guruswamy, Lakshman D., et al. 1999. International environmental law and world order. 2d ed. St. Paul, MN: West Group.

Hall, M.J. 1999. Crisis on the coast: Federal On Scene Coordinator's report and assessment of M/V *New Carissa* oil spill response. Portland, OR: U.S. Coast Guard Marine Safety Office.

Healy, Nicholas J., and David W. Sharpe. 1999. Cases and materials on admiralty. 3rd ed. St. Paul, MN: West Group.

Hildreth, Richard G. 1995. Ocean planning by U.S. coastal states: Legal implications for ocean resource use and preservation. In Law of the sea: What the new convention may mean to you & those you work for, July 11 & 12, 1995, University of Washington, School of Law, Seattle, Washington. Seattle, WA: Washington Law School Foundation, Continuing Legal Education.

Hildreth, Richard G. 1997. Sustainable use of marine and coastal resources under UNCLOS and UNCED: Some Australian, Canadian, and U.S. comparisons. In Sustainable development and preservation of the oceans: The challenges of UNCLOS and Agenda 21: Proceedings of the 29th Annual Conference of the Law of the Sea Institute, June 19-22, 1995, Denpasar, Bali, Indonesia, ed. Mochtar Kusuma-Atmadja, Thomas A. Mensah, and Bernard H. Oxman, 714–718. Honolulu: Law of the Sea Institute, William S. Richardson School of Law, University of Hawaii.

Hildreth, Richard G. 1989. Pacific coast regional coastal zone management plan. Newport, OR: National Coastal Research Institute.

Hildreth, Richard G. 1993. The public trust doctrine and ocean and coastal resources management. Journal of Environmental Law and Litigation 8:221–236.

Hildreth, Richard G., and Ralph W. Johnson. 1985. CZM in California, Oregon, and Washington. Natural Resources Journal 25:103–165.

Hunter, David, et al. 1998. International environmental law and policy. New York, NY: Foundation Press.

International Union for Conservation of Nature and Natural Resources (IUCN). 1995.

The law of the sea: Priorities and responsibilities in implementing the convention. Gland, Switzerland: IUCN.

Johansen, Kenneth, and Richard Parrish. 1979. Oil spills/oil tanker operations. Eugene, OR: Ocean Resources Law Program, University of Oregon.

Keselj, Tatjana. 1999. Port state jurisdiction in respect of pollution from ships: The 1982 United Nations Convention on the Law of the Sea and the memoranda of understanding. Ocean Development and International Law 30:127–160.

Letourneau, Keith B., and Wesley I. Welmaker. 1999–2000. The Oil Pollution Act of 1990: Federal judicial interpretation through the end of the millennium. University of San Francisco Maritime Law Journal 12:147–225.

Li, K.X., and J. Wonham. 1999. Registration of vessels: New developments in ship registration: New developments in ship registration. International Journal of Marine and Coastal Law 14:137–154.

Lodwick, Michael W. 1998. Shipbrokers' liability: An American overview. Tulane Maritime Law Journal 23:45–71.

Lunday, Kevin E., and Stephen J. Darmody. 1998. Using financial markets to protect the environment: U.S. Coast Guard leads the modern approach. University of San Francisco Maritime Law Journal 10:173–208.

Luster, Jeffrey P. 1999. The International Maritime Organization's new mandatory ship reporting system for the northern right whale's critical habitat: A legitimate approach to strengthening the Endangered Species Act. Naval Law Review 46:153–169.

Malek, John, and Craig Vogt. 1999. The New Carissa incident: Report to the London Convention (see appendices for full text).

Maraist, Frank L. 1988. Admiralty in a nutshell. St. Paul, MN: West Publishing Co.

McCarter, Philip. 1999. STCW '95: Implementation issues: What is the pass mark? Marine Policy 23:11–24.

McDorman, Ted L. 2000. Regional port state control agreements: Some issues of international law. Ocean and Coastal Law Journal 5:207–225.

Mitchell, Ronald B. 1994. Intentional oil pollution at sea: Environmental policy and treaty compliance. Cambridge, MA: MIT Press.

Murakami, Jill S. 1999. The dumping of the New Carissa: An analysis of the emergency provisions of the London Convention. Pacific Rim Law & Policy Journal 8:705–730.

New Carissa Review Committee. 2000. *New Carissa* Review Committee report and recommendations to the governor of the state of Oregon. N.p.: The Committee.

Nixon, Dennis, et al. 1999. The Legacy of the North Cape spill: A new legal environment for the tug and barge industry. Ocean and Coastal Law Journal 4:209–270.

Noyes, John E. 2000. Current legal developments. United States—Establishment of a 24-mile U.S. contiguous zone. International Journal of Marine and Coastal Law 15:269–274.

Ozcayir, Z. Oya. 2000. Limitation of liability problems in cases of oil pollution. Maritime Studies, Jan.–Feb., 1–9.

Peet, Gerard. 1992. The MARPOL Convention: Implementation and effectiveness. International Journal of Estuarine and Coastal Law 7:277–295.

Peterson, Mark T. 1999. State incentive based oil tanker regulation: An alternative to traditional command-and-control regulation. Ocean and Coastal Law Journal 4:271–309.

Phillips, Brady. 2000. New action protects California sanctuaries from catastrophic oil spills. Ocean & Coastal Policy Network News 2(1): 7.

Quirk, Patrick. 1999. Flag state implementation. Maritime Studies, Jan.–Feb., 1–7.

Ringbom, Henrik. 1997. Competing norms in the law of marine environmental protection: Focus on ship safety and pollution prevention. London and Boston: Kluwer Law.

Savage, Tyler J. 1998. North American oil pollution: Who is liable for a Canadian/American catastrophe? Roger Williams University Law Review 4:335–386.

Schoenbaum, Thomas J. 1994. Admiralty and maritime law. St. Paul, MN: West Publishing Co.

Smelley, Hutson. 1999–2000. OPA '90 liability in the aftermath of an oil spill. University of San Francisco Maritime Law Journal 12:1–44.

Spadi, Fabio. 2000. Navigation in marine protected areas: National and international law. Ocean Development & International Law 31:285–302.

States/British Columbia Oil Spill Task Force. 1999. Quarterly report to our stakeholders, first quarter 1999. Portland, OR: The Task Force.

Van Dyke, Jon M. 2000. The significance of the U.S. contiguous zone: A commentary. Ocean & Coastal Policy Network News 2(1): 13–15.

Weiland, Paul S. 2000. Preemption of environmental law: Is the U.S. Supreme Court heading in the wrong direction? Environmental Law Reporter 30:10,579–10,585.

Weiss, Edith Brown, et al. 1998. International environmental law and policy. Gaithersburg, NY: Aspen Law & Business.

Year of the Ocean discussion papers. 1998. Washington, D.C: Office of the Chief Scientist, National Oceanic and Atmospheric Administration, U.S. Dept. of Commerce.

ACRONYMS

APPS ..... Act to Prevent Pollution by Ships

CMI ..... Comité Maritime International

COLREGS ..... Convention on the International Regulations for Preventing Collisions at Sea

Corps ..... Corps of Engineers

CWA ..... Clean Water Act

DEQ ..... Department of Environmental Quality (Oregon)

DOE ..... Department of Ecology (Washington)

EPA ..... Environmental Protection Agency (U.S.)

HNS Convention ..... Convention on Carriage by Sea of Hazardous and Noxious Substances

IMO ..... International Maritime Organization

IOPP ..... International Oil Pollution Prevention

ISM Code ..... International Management Code for the Safe Operation of Ships and for Pollution Prevention

MARPOL ..... International Convention for the Prevention of Pollution from Ships

OPA ..... Oil Pollution Act

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

OSPAR Convention ..... Convention for the Protection of the Marine Environment of the North-East Atlantic

PWSA ..... Ports and Waterways Safety Act

SOLAS Convention ..... International Convention for the Safety of Life at Sea

STCW Convention ..... International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers

UNCLOS ..... United Nations Convention on the Law of the Sea

APPENDICES

Appendix A

The New Carissa Incident: Report to the London Convention

Appendix B

Letter Dated August 12, 1999, from René Coenen, Senior Technical Officer, International Maritime Organization, to Matthew Mattson, Ocean and Coastal Law Center, University of Oregon

IMO Resolution LC.56 (SM), Sea Disposal of Vessels

Appendix C

Integrated Vessel Response Plan Format Guidelines for Tank [and Non-Tank] Vessels (provided by States/British Columbia Oil Spill Task Force)

Appendix D

Letter Dated June 2, 2000, from Katy Eymann, Chair, Oregon Marine Pilots Board, to Oregon Secretary of State Bill Bradbury

APPENDIX A

THE NEW CARISSA INCIDENT:
REPORT TO THE LONDON CONVENTION

THE *NEW CARISSA* INCIDENT
Report to the London Convention

John Malek[1] and Craig Vogt[2]

On February 4, 1999, a Panamanian-registered bulk carrier grounded north of the entrance to the Coos Bay estuary in Oregon. The 639-foot New Carissa was en route to Coos Bay to take on a load of wood chips bound for Japan. The vessel had anchored off of the coast in 20-foot seas and 20-25 knot winds awaiting rendevous [sic] with a U.S. pilot. Adverse winds and seas forced the ship onto the beach at a position 2.7 miles north of the entrance to Coos Bay in approximately 20 feet of water. There were 23 persons on board and they sustained no injuries. The *New Carissa* was confirmed to be carrying 396,400 gallons of oil (359,000 of bunker oil and 37,400 of diesel). The vessel, which has a double bottom was reported as resting in sand and initially there was no evidence of leakage. Representatives from the U.S. Coast Guard, Oregon Department of Environmental Quality, and the ship's owner formed a unified command to coordinate response efforts.

High winds and heavy seas throughout the region hampered response efforts. These conditions (gusts to 55 knots with 20-30 foot waves) persisted during the first several days making removal of the oil off the vessel impossible and exacerbated concerns that the vessel would begin to break up. Early the morning of February 8th, Oregon State Park officials advised the Coast Guard that an oily sheen had been detected on the water near the North Point Jetty at Coos Bay. An investigation determined that sporadic "blurps" of oil were coming from the *New Carissa* and evidence of the spill had spread to nine miles north of the ship. A clean-up crew was mobilized to the beach. Fuel tanks 1 and 4 and diesel tanks 1 and 5 were found to be open to the sea, allowing tidal water to enter the tanks. A puncture was discovered in port ballast tank 2 allowing ballast water to escape. The starboard ballast tank was contaminated with fuel and cargo tanks 5 and 6 were taking on water and showed structural integrity problems.

The situation continued to worsen. New storms were predicted to strike the Oregon coast during the next 24-48 hours. Given the weather and location of the vessel in approximately 20-feet of water, physical removal of the oil was too dangerous. Removing the oil through burning would reduce the risk to the environment from the leaking oil. It appeared prudent to take

---

1 Ocean Dumping Coordinator, Region 10, Environmental Protection Agency, Seattle, Washington

2 Deputy Division Director, Oceans and Coastal Protection Division, Environmental Protection Agency, Washington, D.C.

advantage of the relatively stable weather window before the storms hit. Discussions with Region 10, EPA, on February 9th raised the option of a controlled burn of the remaining fuel on-board the vessel as well as removal of the vessel from the beach and towing it to the open sea to be scuttled. EPA concurred with the option of burning the fuel and formally deferred to the U.S. Coast Guard on the matter of scuttling the *New Carissa.* A Navy team from the Explosive Ordinance Division from Whidby Island was brought in to ignite the remaining fuel.

Charges detonated on February 10th failed to ignite the fuel for any length of time. A second attempt by the Navy on February 11th was more successful. However, the vessel had split between cargo holds 5 and 6. Both sections of the vessel continued to burn. While small globules of oil were observed between the ship and beach, no large release of product was evident. Ongoing reignition of the residual oil was authorized to burn as much oil as possible. Between 200,000 and 250,000 gallons of oil were estimated to have burned. By February 15th the consistency of the residual oil was transforming to a thick, waxy substance which reduced the risk of leakage but was more difficult to burn. Inspections on February 17th found approximately 135,000 gallons remaining in the 440-foot bow section, mainly in tank 2 under cargo hold 3. It was estimated that approximately 50,000-70,000 gallons spilled from the ship. Attempts to tow the ship off the beach were unsuccessful. As gale force winds on February 18th had pushed the bow of the ship further onto shore, attempts to pump some of the oil off the ship became viable while waiting for favorable towing conditions.

A tow line was connected to the vessel and effort[s] were initiated to pivot the section toward the sea. After four days of steady pulling in continuing high winds and heavy seas, the Seattle-based tug, *Sea Victory,* towed the *New Carissa* into open water on March 1st. Early the next morning, the towline parted as the vessels were nearly 50 miles west of Coos Bay and encountering 30-foot swells and 60-knot winds. At 7:30 a.m. on March 3rd, the New Carissa ran aground on a sand bar near Waldport, OR, approximately 80 miles north of Coos Bay. Approximately 2,000 gallons was [sic] released by this second grounding.

After four days of restaging and reattaching a towline, the tug *Sea Victory* was able to turn the bow section and tow it into open water on March 8th. It was towed without incident into international waters. On the afternoon of March 11th, the US Navy detonated explosives attached to the bow of the *New Carissa,* then from the five-inch deck guns of the Navy destroyer *USS David R. Ray,* and finally the Navy attack submarine *USS Bremerton* fired a torpedo at the underside of the bow, creating a controlled, massive flooding. The 440-foot bow section of the *New Carissa* went down in one piece 282 nautical miles west of the Oregon coast in more than 10,000 feet of water. An oil slick about 1,000 yards wide appeared as the vessel went down; however, an oil skimmer operated by the Marine Spill Response Corporation, *Oregon Responder,* was on-scene. Follow-up reconnaissance the next day found only an iridescent sheen on the surface that was not recoverable. In this very cold, deepwater environment, the risk from the approximately 100,000 to 130,000 gallons of viscous residual is considered extremely low.

Efforts continue to clean diminishing amounts of oil off beaches from Coos Bay to Lincoln City, OR, as well as to assess the affect of the spillage on wildlife. Quite unusually, very low densities of sea birds were present. At this date, a total of 774 birds have died, significantly fewer than might have been affected later in the year when thousands of birds migrate north along this coast. The stern of the *New Carissa* remains beached near Coos Bay. The Governor of Oregon has called for its removal; however, no decision has been made concerning schedule or method.

APPENDIX B

LETTER DATED AUGUST 12, 1999

FROM RENÉ COENEN, SENIOR TECHNICAL OFFICER
INTERNATIONAL MARITIME ORGANIZATION

TO MATTHEW MATTSON, OCEAN AND COASTAL LAW CENTER
UNIVERSITY OF OREGON

AND

IMO RESOLUTION LC.56 (SM), SEA DISPOSAL OF VESSELS

ORGANISATION MARITIME INTERNATIONALE ORGANIZACION MARITIMA INTERNACIONAL
INTERNATIONAL MARITIME ORGANIZATION

Fax: 0171-587 3210
or Direct fax: 0171-587 . . . .
Telex: 23588 IMOLDN G

4 Albert Embankment
London SE1 7SR

Telephone: 0171-735 7611
or
Direct line: 0171-587 . . . .

12 August 1999

Ref: T5/5.0(1)
RC/mo

Dear Mr. Mattson,

In response to your letter of 2 July 1999 concerning sea disposal of vessels you are advised as follows:

Resolution LC.56(SM) requires a review of sea disposal of vessels before 2001 and lists several actions towards such a review. IMO is currently contacting all Contracting Parties to the London Convention 1972 requesting them to provide information with particular regard to land-based alternatives, methods of assessment, procedures for preventing pollution and the rationale for sea disposal of vessels for consideration by the Scientific Group (operative paragraph 1 of this resolution).

The responses received will be presented to the 23rd meeting of the Scientific Group in 2000 for its consideration. At that meeting, the Draft Specific Guidance for Assessment of Vessels is planned to be completed, so the information collected under Resolution LC.56(SM) can be included in the advice to the Twenty-second Consultative Meeting, which will be held later in 2000. The Environmental Protection Agency in the United States is the lead agency to prepare this draft specific guidance (contact point: Mr. Craig Vogt).

I realize that the above information is purely of a procedural nature. The direction of any advice will however depend on the information provided to us by Contracting Parties, both Parties which issue permits for sea disposal of decommissioned vessels and those which do not issue such permits. In recent years, such permits have been issued by Australia, Brazil, Canada, Chile, Japan, New Zealand, Norway and South Africa.

. . ./2

Mr. Matthew Mattson
University of Oregon
Ocean and Coastal Law Center
1257 E. 19th Street
Eugene
Oregon 97403
United States of America

The different, but associated issue of scrapping of vessels, the safety and environmental aspects of which are getting more and more attention worldwide, will undoubtedly influence the nature of the response we expect from Contracting Parties.

Yours sincerely,

René Coenen
Senior Technical Officer
Office for the London convention 1972
Marine Environment Division

RESOLUTION LC.56 (SM)

SEA DISPOSAL OF VESSELS

THE SPECIAL MEETING OF CONTRACTING PARTIES,

BEING AWARE that sea disposal of vessels as regulated under the London Convention 1972 is carried out by a number of Contracting Parties to that Convention, and BEING ALSO AWARE that sea disposal of vessels has been phased out by a number of Contracting Parties or will be phased out within the near future, as agreed in the context of regional conventions;

HAVING AGREED to include vessels in the list of wastes or other matter that may be considered for dumping at sea as set out in Annex 1 to the 1996 Protocol to the London Convention 1972;

BEING ALSO AWARE that the Scientific Group is developing guidance specifically related to sea disposal of vessels under the London Convention 1972:

1 REQUESTS the Contracting Parties to the London Convention 1972 to provide information with particular regard to land-based alternatives, methods of assessment, procedures for preventing pollution and the rationale for sea disposal of vessels for consideration by the Scientific Group.

2 FURTHER REQUESTS the Organization in its role as Secretariat to the London Convention 1972 to compile existing and requested information specified in paragraph 1 for further consideration by the Scientific Group.

3 REQUESTS the Scientific Group within five years from the adoption of this resolution to review the adequacy of existing international provisions for sea disposal of vessels and report to the Consultative Meeting.

LC/SM 1/6

APPENDIX C

INTEGRATED VESSEL RESPONSE PLAN FORMAT GUIDELINES
FOR
TANK [AND NON-TANK] VESSELS

PROVIDED BY
STATES/BRITISH COLUMBIA OIL SPILL TASK FORCE

Integrated Vessel Response Plan Format Guidelines for Tank Vessels[1]
Updated 3/5/99[2]

PLEASE NOTE: This Integrated Format is provided as a voluntary option. Use of this guidance matrix does not relieve a plan holder from ensuring that all agency requirements are complied with in developing an oil spill contingency plan. It is important that plan holders provide clear and accurate cross-references which demonstrate compliance with all applicable contingency planning regulations.

US COAST GUARD 33 CFR Part 155	MARPOL 73/78 ANNEX 1 Regulation 26	ALASKA 18 AAC 75	WASHINGTON 317-10 WAC	OREGON OAR 340-47	CALIFORNIA CCR Title 14.1.4.3.3 S. 815- 818.03 Tank Vessels S. 825-827.01 Nontank Vessels
I. Record of Changes 1035 (a)(5)		425 (c)(2) date of plan	050 (2) Log sheet, record of changes	150 (2))Plan amendments	816.02 (b) (2) (D) & (E) Log sheet 826.02 (b) (2) (D) & (E) Log sheet
II. Table of Contents 1035 (a)(4)	No specific requirement	425 (d)(3) plan contents	050 (3) Table of contents	150 (3) Table of contents	816.02 (b) (2) (A) Table of Contents 826.02 (b) (2) (A) Table of Contents
III. General information and introduction 1035 (a)	Section 1 Introduction		050 (1) (a) Name, address, phone number for submitting party	150 (1) (a) Name, address, phone number for submitting party	818.02 (a), 827.02(a) Intro material 818.02 (d) (2), 827.02(a)(2) QI 816.02 (b) (2) (D) & (E) Log Sheet 826.02 (b) (2) (D) & (E) Log Sheet
A. Statement of Purpose/Scope		425 (a) be in a usable format 425 (c) promulgation letter 425 (d) plan contents 425 (e) (3) (A) operational overview	050 (1) Submittal Agreement requirements 050 (4) Purpose & Scope	150 (1) Submittal agreement 150 (4) Purpose and Scope	815.03, 825.03 Purpose and Scope
B. List of vessels covered by name; reference VSA for additional vessel information 1035 (a)(1)		425 (c)(1) covered vessels as in promulgation letter	050 (1) (d) Vessel name, etc.	150 (1) (d) (B)&(C) Vessel information	818.02 (a) (1), 827.02 (a) (1) Vessel Information

[1] See CFR 1040 for USCG regulations covering tank barges; all numbering should correspond. State regulations cited cover both tankers and tank barges in all states, plus cargo and passenger vessels in Oregon and Washington.

[2] This format guideline will be updated as needed to reflect any regulatory changes adopted by the participating agencies: the Alaska Department of Environmental Conservation, the Washington Department of Ecology, the Oregon Department of Environmental Quality, the California Office of Spill Prevention and Response, and the US Coast Guard.

C. List COTP zones/geographic areas covered; reference GSA for details 1035 (a) (3)		425 (e) (3) (A)(iii) normal vessel routes in state waters	050 (4) (a) & (b) Geographic area and vessel operations covered by plan 050 (29) Spill risk variables within geographic area 050 (30) environmental variables within geographic area	150 (1) (d) (B) Oregon ports of call, types of operations 150 (4) (a) & (b) Region covered by plan 150 (23) (b) Sensitive areas 150 (28) Risk Variables 150 (29) Environmental variables	818.02 (d) (1) (A), 827.02 (g) (1) (A) Normal routes of travel
D. Certification letter 1025 (c)(2) & 1065 (b)		425 (c)(3) promulgation letter	050 (1) (b) & (c) Letter of acceptance & authority	150 (1) Submittal agreement	816.03 (d)(6), 826.03(e)(1) Plan approval 816.04 (b), 826.04(b) Implementation 818.01 (b) (2) Operation w/o a plan 818.02 (a) (1) (E), 827.02(a) (1) (E) Certification statement

US COAST GUARD	MARPOL 73/78 ANNEX 1	ALASKA	WASHINGTON	OREGON	CALIFORNIA
33 CFR Part 155	**Regulation 26**	**18 AAC 75**	**317-10 WAC**	**OAR 340-47**	**CCR Title 14.1.4.3.3 S. 815- 818.03 Tank Vessels S. 825-827.01 Nontank Vsls**
IV. Notification procedures and List of Contacts	Section 2 Mandatory Provisions				
A. Notification Checklist (in priority order as set by owner/operator) 1035 (b)(1) 1. Shipboard notification checklist 1035 (b)(2)(i), 1035 (b)(3), 1035 (b)(6), 1035(e)(2), 1035 (i)(5) 2. Shore-based notification checklist 1035 (b)(2)(i) & (ii), 1035 (i)(3), 1040 (i)(1)	2.2 Notification Procedures 2.4 Persons to be Contacted 2.6 National and Local Coordination	300 (a) Discharge notification 425 (e) (1) (A) Emergency Action checklist 425 (e) (1) (B) (i) Persons responsible for notification 425 (e)(1)(B) (ii) Notification of government agencies 425 (e) (1) (E) (ii) Notification of response action contractor 425 (e) (3) (C) Command system	050 (11) (a) & (b) Call-out list and responsible person 050 (17) (a) List of government authorities responsible for related emergency procedures	150 (11) (a) & (b) Notification call out list 150 (17) (a) Government agencies with related emergency authorities	818.02 (h) (1)-(4), 827.02 (h) (1)-(4) Notification procedures, list of contacts, information checklist 818.02 (h)(2), 827.02(h)(2) Immediate notification of OSRO, QI, state OES, and NRC
B. Owner/operator contact information 1035 (a)(2) & 1035 (e)(1)		425 (e) (1) (B) (i) Title and number of person responsible for notification See IV. A	050 (1) (a) & (d) Name, address, and phone of submitting party plus vessel specific information	150 (1) (a) & (b) Owner/operator information 150 (1) (d) (B) & (C) Vessel information	818.02 (a) (1) (B) - (C) 827.02 (a) (1) (B) - (C) Owner / Operator contact information
C. Methods of communication 1035 (b)(4) 1. Primary 2. Secondary		425 (e) (1) (D) Communications used in a response	050 (14) Communications system 050 (15) (b) Central Communications post	150 (14) Communications 150 (15) (b) Central Communications post	818.02 (h), 827.02(d) Notification procedures
D. Information to provide 1035 (b)(5)	2.3 Coastal State Report 2.6 National and Local Coordination	307 (c) Discharge Report Contents	Covered elsewhere	015 (1) (d) Immediate notification	818.02 (h) (4), 827.02 (d) (4) Notification checklist
E. List of additional contacts 1035 (e)		See notification checklist in IV. A	See notification checklist in IV. A	See notification checklist in IV. A	818.02 (h) (1)&(2), 827.02(d) (1)&(2)
1. Insurer 1035 (e)(3)		See notification checklist in IV. A	See notification checklist in IV. A	See notification checklist in IV. A	818.02 (h) (1), 827.02 (d) (1)
2. Local agent 1035 (e)(4)		See notification checklist in IV. A	See notification checklist in IV. A	See notification checklist in IV. A	818.02 (h) (1), 827.02 (d) (1)

3. Oil spill removal organization (AMPD, MMPD, WCD) 1035 (e)(5), 1035 (i)(5)		425(e) (1)(E)(ii), 445 (i) Notification of Response Action Contractors	050 (8) (a) & (b) Response contractor identification 050 (12) Response personnel 050 (13) Response equipment 050 (21)(d) & (22)(d) Location & access to non-mechanical recovery equipment 050 (31) Logistical resources in area	150 (8) Response Contractors 150 (12) Response personnel 150 (13) Equipment 150 (14) Communications 150 (21) (d) Dispersant supplies 150 (22) (d) In situ burn supplies 150 (30) Logistical resources	818.02 (h) (2) (A), 827.02(d)(1)(A) Immediate OSRO notification 816.02 (c) (3) (B), 827.02(a)(1)(G) Identification of OSROs
4. Salvage, firefighting, and lightering 1035 (e)(6), 1035 (i)(6), 1035 (i)(9)		027 (a), 037 (a), 425 (e)(1)(F)(viii), 445 (d)(6) Lightering	050 (17) (a) (i) firefighting	150 (17) (a) (A) firefighting	818.02 (e) (5) (B) 10&11, 818.02(m) 827.02(h)(3)(B)10&11, 827.02(n) Appropriate equipment
5. Spill management team 1035 (e)(7)	3.4 Public Affairs	See notification checklist in IV. A , plus 425 (e) (3) (C) Command system	See notification checklist in IV. A, 050 (7) Spill response organization 050 (12) Response personnel	See notification checklist in IV. A 150 (7) Spill Response system 150 (12) Response personnel	818.02 (f) (1), 827.02(j)(1)
F. Persons to call for stability and stress assessment 1035 (b)(6), 1035 (c)(11)	2.4 Persons to be Contacted	See notification checklist in IV. A	See notification checklist in IV. A	See notification checklist in IV. A	818.02 (e) (5) (B) II, 818.02(m) 827.02 (h) (3) (B) II, 827.02(n) Identification of salvage company

US COAST GUARD 33 CFR Part 155	MARPOL 73/78 ANNEX 1 Regulation 26	ALASKA 18 AAC 75	WASHINGTON 317-10 WAC	OREGON OAR 340-47	CALIFORNIA CCR Title 14.1.4.3.3 S. 815- 818.03 Tank Vessels S. 825-827.01 Nontank Vsls
V. Shipboard spill mitigation procedures					
A. Operational spill procedures 1035 (c)(1)	2.5 Steps to Control Discharge	425 (e) (1) (E), 445 (c) Deployment strategies 425 (e) (1) (F), 445 (d) Response Strategies	050 (7) Spill response organization 050 (10) Spill detection 050 (16) Flowchart, decision tree, checklists 050 (17) (b) Plan holder's role 050 (18) Vessel personnel's initial response 050 (19) Spill containment and removal 050 (20) Initial deployment	150 (7) Spill Response System 150 (10) Spill detection 150 (16) Response flow chart 150 (17) (b) Plan holder's role 150 (18) Damage control 150 (19) Deployment & Removal 150 (20) Response time/Initial Deployment	818.02 (c), 827.02(c) Prevention measures 818.02 (g), 827.02(j) Response procedures 818.02 (e), 827.02(h) On Water Containment and Recovery
B. Casualty procedures 1035 (c)(2)	2.5 Steps to Control Discharge	Covered in IV. A	Covered in A. above	Covered in A. above	Covered in A. above
C. Discharge removal equipment deployment for deck spills 1035 (c)(3)	2.5 Steps to Control Discharge	425 (e) (1) (E), 445 (c) Deployment 425 (e) (1) (F), 445 (d) Response Strategies	050 (16) Flow Chart 050 (18) Vessel personnel's initial response 050 (19) Spill containment and removal	150 (7) Spill Response System 150 (16) Response flow chart 150 (18) Damage control 150 (19) Containment	818.02 (c), 827.02(c) Prevention Measures 818.02 (g), 827.02(j) Response Procedures 827.2(c)(3) On-Deck Spill Kit
D. Internal transfer procedures 1035 (c)(4)	2.5 Steps to Control Discharge	425 (e)(1)(F)(viii), Transfer of oil Also see IV. A	Covered in A. above	Covered in A. above	818.02 (c), 827.02(c) Prevention Measures
E. Ship-to-ship transfer procedures 1035 (c)(5)	2.5 Steps to Control Discharge	425 (e)(1)(F)(viii), 445 (d)(6) Transfer of oil	Covered in A. above	Covered in A. above	818.02 (c), 827.02(c) Prevention Measures 827.02 (a)(1)(H) Transfer Procedures
F. Location of vessel plans 1035 (c)(11), 1035 (j)(4)-(9)	2.5 Steps to Control Discharge	465 (a) (2) Proof of approved plan	075 (1) Copy of plan at central location 075 (2) Field Document	210 (1) (2) Plan access and field document	816.04 (a)(2) (A), 826.04(a) Plan availability
	Section 3 Non-Mandatory Provisions				
G. Emergency towing 1035 (c)(6)		027 (f), 037 (f) Tow Line	Covered in A. above	Covered in A. above	818.02 (e) (5) (B) II, 818.02(m) 827.02 (h) (3) (B) II, 827.02(n) Identification of salvage company

US Coast Guard 33 CFR Part 155	MARPOL 73/78 ANNEX 1 Regulation 26	ALASKA 18 AAC 75	WASHINGTON 317-10 WAC	OREGON OAR 340-47	CALIFORNIA CCR Title 14 1.4.3.3 S. 815- 818.03 Tank Vessels S. 825-827.01 Nontank Vsls
H. Location of shipboard spill mitigation equipment and procedures for use 1035 (c)(7)	3.3 Response Equipment	425 (e)(1)(H) Vessel diagrams 425 (e)(3)(F) Response equipment 445 (g) Response equipment	Covered in 050 (13), but does not satisfy all parts of 050 (13)	150 (18) Damage control	818.02 (g), 827.02(j) Response procedures
I. Record keeping and sampling procedures, if any, for crew 1035 (c)(8)	3.5 Record-keeping	007 (h) Record keeping requirements	050 (10) Spill detection & documentation	150 (10) Spill detection and documentation	Not specifically covered
V. J. Crew initiation of response 1035 (c)(9)		425 (e) (1) (E) Deployment strategies 425 (e) (1) (F) (v) Exclude oil from sensitive areas 425 (e) (3) (J) Discharge tracking	050 (7) Spill response organization 050 (11) (c) Incident categorization 050 (16) Flowchart, decision tree, checklists 050 (17) (b) Plan holder's role in initial response 050 (18) Vessel personnel's initial response 050 (20) Initial deployment	150 (7) Spill Response system 150 (11) (c) Incident category 150 (16) Response flow chart 150 (17) (b) Plan holder's role 150 (18) Damage control 150 (19) Containment 150 (20) Response time	818.02 (g) (4)&(5), 827.02(j) Response procedures
K. Stress & Stability Considerations 1035 (c)(10)		027 (a), 037 (a), 425 (e) (1) (F) (viii) Lightering	050 (18) (a) & (b) Methods to achieve stability	Covered in V. A. above	818.02 (g) (5), 818.02 (m) 827.02 (j), 827.02 (n)
VI. Shore-based response activities		425 (e) (3) (C) Command	050 (7) Spill response organization 050 (8) Primary response contractor 050 (15) Command site selection 050 (16) Flowchart 050 (17) (b) Plan holder's role 050 (19) Containment and removal 050 (24) Interim waste storage	150 (7) Spill Response system 150 (8) Contractors 150 (15) Response operation sites 150 (16) Response flow chart 150 (17) (b) Plan holder's role 150 (19) Containment 150 (24) Interim waste storage	
A. QI responsibilities and authority 1035 (d)(1)		007 (b), (d) Compliance with other agency laws 425 (e) (3) (C) Command	050 (7) Spill response organization 050 (12) (a) Position descriptions	150 (7) Spill Response system 150 (12) (a) Job descriptions	818.02(a)(2), 827.02(a)(2) Qualified individual 818.02(h)(2), 827.02(d)(2) Notification procedures
B. Transfer response direction from ship to shore 1035 (d)(2)		425 (e) (3) (C) Command 425 (e) (1) (E) Deployment	050 (7) Transfer of authority 050 (15) Central Command post 050 (16) Flowchart & checklists	150 (7) Spill Response system 150 (16) Response flow chart 150 (15) Response operations	818.02 (g) (3), 827.02(j)(3) Flowchart
C. Coordination with FOSC 1035 (d)(3)	2.6 National and Local Coordination	425 (e) (3) (C) Command	050 (7) Response Organization 050 (9) Relation to local, state, federal emergency plans	150 (7) Spill Response system 150 (9) Relationship to other plans	818.02 (g) (1)&(6), 827.02 (j) (1)&(4)

D. Organizational structure 1035 (d)(4) (can be fulfilled by citing NIIMS/ICS)		425 (e) (3) (C) Command	050 (7) Response organization 050 (9) Relation to local, state, federal emergency plans 050 (12) Response personnel	150 (7) Spill Response system 150 (9) Relationship to other plans 150 (12) Response personnel	818.02 (g) (1), 827.02(j)(1)
E. Responsibilities of SMT positions 1035 (c)(5) (can be fulfilled by citing NIIMS/ICS)		425 (e) (3) (C) Command	050 (12) (a) Position descriptions	150 (12) (a) Job descriptions	818.02 (g) (1), 827.02(j)(1) Response procedures

US Coast Guard	MARPOL 73/78 ANNEX 1	ALASKA	WASHINGTON	OREGON	CALIFORNIA
33 CFR Part 155	Regulation 26	18 AAC 75	317-10 WAC	OAR 340-47	CCR Title 14.1.4.3.3 S. 815- 818.03 Tank Vessels S. 825-827.01 Nontank Vsls
VII. Training and Exercise procedures 1035 (f)-(g)	3.7 Plan Testing	425 (e) (3) (I) Response Training 445 (j) Training 485 Discharge exercises 027 (b), 037 (b) Vessel person responsible for training 007 (d) & (h) Prevention training	050 (12) (d) Response team training 050 (25) Health & Safety procedures 050 (27) Drills, exercises, and call out procedures 070 (1) & (2) Drill requirements	150 (12) Response personnel 150 (25) Health & Safety 150 (27) Drills & Exercises 200 Drills & Inspections	818.02 (k) Training 818.02 (l), 827.02(m) Drills and Exercises 820.01 Drills & Exercises – Evaluation & Credit
VIII. Plan review and update procedures 1035 (h)	3.6 Plan Review	405 Pre-application procedures 410 Application Approval 415 Plan amendment 420 Application for Renewal 425 (a) Usable working plan	050 (5) Plan update procedures 050 (26) Post spill review procedures 080 Plan update timeline	150 (5) Plan updates 150 (26) Post spill review 180 Plan submittal 210 Plan maintenance & use 220 Plan update timeline	816.03(g), 827.02(g) Appeals 816.05, 826.05 Plan updates 818.02(g)(7), 827.02(f) Post spill review
IX. Geographic-specific appendices 1035 (i)		425 (e) (3) (A) (iii) Transportation routes 425 (e) (3) (J), 445 (d) (4) Protection of environmentally sensitive areas	050 (4) (a) & (b) Geographic area and vessel operations covered by plan 050 (12) (c) Pre-positioned personnel 050 (17) (a) (i) (ii) Peripheral government authorities 050 (23) Environmental protection 050 (28) Spill prevention measures 050 (29) Spill risk variables 050 (30) Environmental variables 050 (32) Response Scenarios	010 (18) & (36) (c) Definitions 150 (1) (d) (B) & (C) Local operations 150 (4) (c) Possible spills 150 (12) Response personnel 150 (17) Local, state, and other authorities 150 (23) (b) Sensitive area protection 150 (28) (b) Risk variables 150 (29) Environmental variables 150 (31) Scenarios	816.02 (c) (3), 826.01(a)(1) Geographic specific 818.02 (d) (1) (A)827.02(g)(1)(A) Normal routes of travel 818.02 (e), 827.02(h) On-water containment and recovery 818.02 (f), 827.02(i) Shoreline protection and cleanup 818.02 (h), 827.02(d) Notification
X. Vessel specific appendices 1025 (j), 1035 (a)(1)	3.2 Plans and Diagrams	425 (e) (1) (H) Vessel related information 425 (e) (3) (A) (iii) & (iv) Vessel specific transportation routes	050 (1) (a) & (d) Plan holder name, address, etc. 050 (16) Flowchart, decision tree, checklists 050 (29) Spill risk variables	150 (1) (a) Plan holder information 150 (1) (d) (B)&(C) Vessel information 150 (16) Response flowchart 150 (28) (b) Risk variables 150 (32) Financial responsibility	818.02(a)(1)A-E, 827.02(a)(1)A-D Vessel information 818.02 (b). 827.02(B) Vessel description

US COAST GUARD	MARPOL 73/78 ANNEX 1	ALASKA	WASHINGTON	OREGON	CALIFORNIA
33 CFR Part 155	Regulation 26	18 AAC 75	317-10 WAC	OAR 340-47	CCR Title 14.1.4.3.3 S. 815- 818.03 Tank Vessels S. 825-827.01 Nontank Vsls
XI. Additional Appendices To Cover State or USCG Elements as listed: 1030 (c) 1035 (d) - (n)		425 (e) (1) (F) (ix) Transfer & storage of recovered oil 425 (e) (1) (F) (x) Temporary storage and disposal of oil and solid wastes 425 (e) (1) (F) (xii) Shoreline cleanup plans 425 (e) (1) (G), 445 (h) Nonmechanical response options 425 (e) (2) Spill Prevention Plan 425 (e) (3) (A) (v) Loading and Transfer Operations 425 (e) (3) (D), 445 (f) Realistic maximum response operating conditions 425 (e) (3) (E) Logistical support 425 (e) (4) Best Available Technology 007, 027 Spill Prevention **Also Review:** 307 Discharge reports 337 Adequacy of cleanup 425 (e) (3) (L) Bibliography 425 (e) (3) (K) Additional information 430, 438, 440 Response Planning Standards	050 (6) Strategy to ensure use of plan 050 (21), (a) - (c) Dispersant capability 050 (22), (a) - (c) In Situ Burn capability 050 (33) Glossary **Also Review:** 317-10 - 010 through 085: Other regulations governing vessel contingency planning	150 (6) Implementation strategy 150 (21), except (d) Dispersants 150 (22), except (d) In situ burning 150 (23), except (b) Environmental protection 150 (24) Interim storage 150 (25) Health & Safety 150 (28), except (b) Risk Variables 150 (33) Glossary **Also Review:** 340-47-100 to 140, and 170-230: Other regulations governing vessel contingency planning	818.02(i), 827.02(k) Temporary Storage 818.02(j), 827.02(l) Wildlife rehabilitation requirements **Also Review:** 815.05, 825.02 Definitions 815.07, 825.07 General requirements 816, 826 Plan Submittal, Review, and Approval requirements 816.02, 826.02 Plan Format 819 Approval Process for Oi Spill Response Organization
Cross-Reference Guidelines 1030 (g)		425 (d) (4)			816.02 (d) (1), 826.02(c) Cross reference list

APPENDIX D

LETTER DATED JUNE 2, 2000

FROM
KATY EYMANN, CHAIR
OREGON MARINE PILOTS BOARD

TO
OREGON SECRETARY OF STATE
BILL BRADBURY

Oregon
John A. Kitzhaber, M.D., Governor

Board of Maritime Pilots
State Office Building
Suite 507
800 NE Oregon Street #15
Portland, OR 97232
(503) 731-4044
FAX (503) 731-4043

June 2, 2000

Bill Bradbury
Secretary of State
State of Oregon
136 State Capitol
Salem, OR 97310

Re: Prohibition on Ships Anchoring Within Oregon's Territorial Seas

Dear Secretary Bradbury:

At its meeting of May 16, the Board of Maritime Pilots unanimously agreed to communicate to you their recommendation that a prohibition on ships anchoring in Oregon's territorial seas, be enacted by the State Land Board. We respectfully submit the following proposed language for your use in adopting an administrative rule.

(1) Except as provided in subsections (2) through (4), no vessel exceeding 150 feet in length shall anchor in the ocean within the area over which Oregon has territorial jurisdiction.

(2) In cases of distress or other emergency, vessels otherwise prohibited from anchoring by subsection (1) may anchor in the ocean within Oregon's territorial jurisdiction, provided that notice is given to the United States Coast Guard and the Division of State Lands prior to anchoring or as soon thereafter as is practicable. The notice required by this subsection includes the name and dimensions of the vessel, its nationality, its cargo, the amount of fuel on board, its last port of call and its next intended port of call, its location and, if different, the location it intends to anchor, and a detailed description of the emergency or distress that requires the vessel to anchor. The right to anchor pursuant to this subsection shall remain only for so long as the emergency or distress that required anchoring persists.

(3) Notwithstanding paragraph (1), the Division of State Lands may issue permits that allow anchoring in the ocean within Oregon's territorial jurisdiction by specified vessels at specified locations and for specified times when anchoring is necessary for vessels to conduct activities such as cable laying or repair, pipeline construction or repair, salvage operations, scientific research or

other similar activities. Permits authorized by this subsection must be applied for and issued prior to anchoring.

(4) The prohibition on anchoring set forth in subsection (1) does not apply to any military vessel owned or operated by the United States.

In order to facilitate this prohibition more quickly, the Board is also contacting the United States Coast Guard's Captain of the Port to recommend that a *Notice to Mariners* be issued containing a similar prohibition.

Thank you for your time and consideration of this matter.

Sincerely,

Katy Eymann, Chair

cc: Board Members
Frank Mussell, Asst. Attorney General
Capt. James Spitzer, U.S.C.G.
Kevin Davis