

VII. REVIEW OF MAJOR LEGAL ACTIONS

This section provides summary information about major cases that have affected this sector and contains information on Supplemental Environmental Projects (SEPs) negotiated in some of those cases. As indicated in EPA's Enforcement and Compliance Assurance Accomplishments Reports from 1992 to 1996, several significant enforcement actions were resolved involving the water transportation industry. Those cases are discussed in more detail below.

VII.A. Review of Major Cases

As shown in the previous tables, there have been only 86 enforcement actions taken against water transportation industries over the past 5 years. Stemming from those 86 actions are at least 50 cases, some of which are discussed in more detail below. The 50 cases can be categorized as follows:

- 2 Clean Air Act cases
- 16 Clean Water Act cases
- 14 RCRA
- 6 CERCLA
- 4 TSCA
- 2 multimedia (Clean Air Act/Clean Water Act, Clean Water Act/Oil Pollution Act)
- 6 other (Ocean Dumping Ban Act, various international treaties).

Of these 50 cases, 16 were against federal facilities and 14 were criminal cases. Supplemental environmental projects were negotiated in 3 of the cases. (These are discussed in more detail in the following section.) The following cases are examples of EPA's enforcement against water transportation industries.

In 1993, the first criminal prosecution ever to enforce the provisions of an international treaty that prohibits the disposal of plastics at sea was taken against the operators of a large "fish-factory" vessel. The Michelle Irene Joint Venture, doing business as Golden Age Fisheries pleaded guilty to a charge of knowingly disposing of plastics into the sea and was sentenced to pay \$150,000. The dumping of plastics by American flag vessels was

outlawed on December 31, 1988, with the implementation of Annex V of the International Convention for the Pollution of Ships, known as the MARPOL Protocol. Former crew members provided information to EPA that they had dumped plastics overboard under orders from management. The vessel is a 253-foot fish-processor that uses large quantities of plastic bags, liners, straps, and containers. Although the vessel was equipped with a state-of-the-art incinerator capable of burning plastic, a fire while at sea rendered the incinerator virtually inoperable, thus the vessel dumped the plastics.

Also in 1993, two shipping executives, William Reilly and J. Patrick Dowd, were sentenced to prison for ocean dumping and perjury regarding a voyage of the *Khian Sea*. The voyage began in 1986 when approximately 15,000 tons of Philadelphia's municipal incinerator ash were shipped on the vessel to an intended disposal location in the Bahamas. However, the ship was refused permission to dispose of the ash and in various other locations. After seeking a disposal location without success, the ship returned to the lower Delaware Bay. While there, the ship slipped away against the orders of the Coast Guard, dumped its cargo in the Atlantic and Indian Oceans, and arrived empty in Singapore. By that time, the ship had been sold at least once to off-shore companies and its name had changed.

Reilly and Dowd were executives or affiliated with several companies that acted as the charterer, agent, and owner of the *Khian Sea*. Their trial in June 1993 featured testimony of three crewmen, including the captain, and a photograph taken by a crew member of ash being bulldozed off the ship. Reilly was convicted of one count of ocean dumping, one count of lying to a federal judge, and one count of lying to a federal grand jury over the ash's disappearance. Reilly was sentenced to a total of 37 months in prison, a \$7,500 fine, and 36 months of supervised probation. Dowd, convicted on one count of lying to a federal grand jury concerning the disappearance of the ash, was sentenced to a total of five months of imprisonment, five months of home detention, a \$20,000 fine, and 36 months of supervised probation.

A case of national significance to federal facilities occurred in 1994 when EPA issued a complaint against the U.S. Coast Guard Kodiak Support Center, Kodiak, Alaska. The complaint was the first action brought against a civilian federal agency under the Federal Facility Compliance Act of 1992. This act is an amendment to RCRA that allows EPA to assess civil penalties against federal agencies in the same way it does against private companies. The complaint resulted from two major violations of RCRA -- failure to properly monitor groundwater in an area where cleaning solvents had been dumped on the ground, and the illegal

storage of hazardous waste without a proper permit from EPA. In the complaint, EPA sought penalties of more than \$1 million.

In a case taken against a cruise ship company, Palm Beach Cruises, the corporate owner of the cruise ship MV Viking Princess, was sentenced in 1994 on two felony counts of having knowingly violated the CWA and the OPA. The basis for the prosecution was the deliberate dumping of waste oil from the cruise ship into the ocean off the coast of Florida. The discharge created a visible sheen that was detected during a joint operation conducted by the Coast Guard, EPA, the Federal Bureau of Investigation and the Department of Justice. The corporation entered its guilty pleas and was sentenced to 5 years probation and a fine of \$500,000.

EPA regulates not only activities that occur in salt water areas, but also those that occur in inland waterways. For example, M/G Transport Services, Inc., a former officer of the firm, and two tugboat captains were convicted in 1995 of polluting the Ohio and Mississippi Rivers over a 30-year period. The charges alleged that M/G ships, based in Ohio, dumped oily bilge slops, burned waste and garbage including plastic, kitchen waste, metal, glass and paint chips into the rivers from 1971 until 1992. The jury convicted the four defendants on various charges ranging from felony conspiracy to dump oil to misdemeanor charges of dumping garbage overboard from tugboats operated by the company. In a similar case, Bruce D. McGinniss was sentenced for also dumping pollutants into the Ohio River over a period of years. McGinniss was sentenced to probation for two years and fined \$25,000. McGinniss, Inc. (the company) was also placed on probation for two years and fined \$120,000. The defendant admitted he had operated barge services on the Ohio River from which residues of ammonium nitrate, sewage, magnetite, coke, pig iron, lime, grain, salt, sand, gravel, coal, iron ore, fuel and other pollutants were routinely washed into the river.

VII.B. Supplemental Environmental Projects

Supplemental Environmental Projects (SEPs) are compliance agreements that reduce a facility's stipulated penalty in return for an environmental project that exceeds the value of the reduction. Often, these projects fund pollution prevention activities that can significantly reduce the future pollutant loadings of a facility. The following are examples of three SEPs negotiated with water transportation facilities.

In 1995, EPA announced that the U.S. Coast Guard Academy in New London, Connecticut, agreed to spend \$259,254 on pollution prevention SEPs as part of an enforcement settlement for hazardous waste violations. During an inspection of the facility, the Region cited the Coast Guard

Academy for violations ranging from failure to maintain adequate records to improper storage of incompatible waste. The Coast Guard agreed to a SEP to remove two underground storage tanks and one aboveground tank. The Coast Guard also will replace its current waste storage modular building with a permanent concrete block container storage building. The new building will be used for the management of hazardous and other regulated wastes. The SEP will directly decrease the likelihood of pollution migrating into the Thames River, with which members of the community regularly come into contact for fishing and recreational purposes.

In another SEP, the Port of Portland agreed to two SEPs to analyze and remove contaminated sediments from the port waters. The SEPs stemmed from an action against the port for unpermitted toxic discharges. The port was also required to pay a penalty of \$92,000.

In 1994, the State of North Carolina took action against the North Carolina Department of Transportation Ferry Division for a variety of violations, including open containers of waste paint thinner; failure to conduct weekly inspections; failure to train personnel involved in hazardous waste management, complete annual training updates, and maintain training records; and failure to maintain and operate the facility so as to minimize releases. For these violations, the Department of Transportation was to pay a penalty of \$10,000 and conduct two SEPs, which included:

- Waste reduction, including:
 - Replacing conventional oil filters with a reusable oil filter screening system and use of filtration units on coolant systems
 - Using a filter system in parts cleaning machines to cut down on replacement of solvent
 - Implementing a solvent distillation system.
- Recycling program, including:
 - Further development of a ferry customer newsletter on recycled paper
 - Aluminum/cardboard/plastic collection operation at four additional ferry sites; reuse of plastic dredge piping as chafing gear on piling clusters
 - Public awareness through use of posters and distributing brochures to ferry customers.

VIII. COMPLIANCE ASSURANCE ACTIVITIES AND INITIATIVES

This section highlights the activities undertaken by this industry sector and public agencies to voluntarily improve the sector's environmental performance. These activities include those independently initiated by industrial trade associations. In this section, the notebook also contains a listing and description of national and regional trade associations.

VIII.A. Sector-related Environmental Programs and Activities

Environmental compliance assurance activities have been conducted by the major trade associations for the water transportation industry. The following examples represent some of the industry initiatives that promote compliance, or assess methods to reduce environmental contamination.

Florida Clean Marina Program

Currently in Florida, the regulatory process for existing marinas and boatyards is viewed as strictly reactive. The Florida Clean Marina Program is proposing a proactive approach that is non-confrontational and non-adversarial and provides a level of compliance not available under the current regulatory program. The goal of the program is to assist marinas in improving the environmental quality of Florida's waterways. Four program components are being developed:

- Education and Awareness - Includes a series of community-based strategies promoting the other three components and the use of best management practices specific to the marina and the ecosystem in which it is located.
- Award Recognition - Recognizes those marinas that adopt multimedia BMPs over and above the minimum and result in net positive environmental impact.
- Incentive Grants - Encourages marinas to adopt BMPs that may be financially difficult in the short term. Technical assistance, loans, and grants will be explored as mechanisms to assist BMP adoption and implementation.
- "Clean Marina" Designation - Provides a voluntary means by which marinas and boatyards will actively adopt site-specific, ecosystem-based, multimedia BMPs.

Clean Water Trust

The Clean Water Trust is sponsoring three voluntary programs, including:

- “Stash Trash” program - encourages boaters, marina operators, and waterfront business owners to help keep the waters of the Gulf of Mexico clean. Dockside signs and a brochure will describe the problems caused by marine debris.
- Investigating alternative fuels - In conjunction with the Maryland Soybean Board, currently studying the possibilities of soydiesel fuel use in recreational boats.
- “Help Stop the Drop” - This program works toward cleaner water and air in the Gulf of Mexico by reducing pollution caused by fuel spills and refueling of marine engines.

VIII.B. EPA Voluntary Programs

VIII.B.1. Environmental Leadership Program

The Environmental Leadership Program (ELP) is a national initiative developed by EPA that focuses on improving environmental performance, encouraging voluntary compliance, and building working relationships with stakeholders. EPA initiated a one year pilot program in 1995 by selecting 12 projects at industrial facilities and federal installations that demonstrate the principles of the ELP program. These principles include: environmental management systems, multimedia compliance assurance, third-party verification of compliance, public measures of accountability, pollution prevention, community involvement, and mentor programs. In return for participating, pilot participants received public recognition and were given a period of time to correct any violations discovered during these experimental projects.

EPA is making plans to launch its full-scale Environmental Leadership Program in 1997. The full-scale program will be facility-based with a 6-year participation cycle. Facilities that meet certain requirements will be eligible to participate, such as having a community outreach/employee involvement programs and an environmental management system (EMS) in place for 2 years. (Contact: <http://es.inel.gov/elp> or Debby Thomas, ELP Deputy Director, at 202-564-5041)

VIII.B.2. Project XL

Project XL was initiated in March 1995 as a part of President Clinton’s Reinventing Environmental Regulation initiative. The projects seek to achieve cost effective environmental benefits by providing participants

regulatory flexibility on the condition that they produce greater environmental benefits. EPA and program participants will negotiate and sign a Final Project Agreement, detailing specific environmental objectives that the regulated entity shall satisfy. EPA will provide regulatory flexibility as an incentive for the participants' superior environmental performance. Participants are encouraged to seek stakeholder support from local governments, businesses, and environmental groups. EPA hopes to implement fifty pilot projects in four categories, including industrial facilities, communities, and government facilities regulated by EPA. Applications will be accepted on a rolling basis. For additional information regarding XL projects, including application procedures and criteria, see the May 23, 1995 Federal Register Notice. (Contact: Fax-on-Demand Hotline 202-260-8590, Web: <http://www.epa.gov/ProjectXL>, or Christopher Knopes at EPA's Office of Policy, Planning and Evaluation 202-260-9298)

VIII.B.3. Climate Wise Program

EPA's ENERGY STAR Buildings Program is a voluntary, profit-based program designed to improve the energy-efficiency in commercial and industrial buildings. Expanding the successful Green Lights Program, ENERGY STAR Buildings was launched in 1995. This program relies on a 5-stage strategy designed to maximize energy savings thereby lowering energy bills, improving occupant comfort, and preventing pollution -- all at the same time. If implemented in every commercial and industrial building in the United States, ENERGY STAR Buildings could cut the nation's energy bill by up to \$25 billion and prevent up to 35% of carbon dioxide emissions. (This is equivalent to taking 60 million cars off the road). ENERGY STAR Buildings participants include corporations; small and medium sized businesses; local, federal and state governments; non-profit groups; schools; universities; and health care facilities. EPA provides technical and non-technical support including software, workshops, manuals, communication tools, and an information hotline. EPA's Office of Air and Radiation manages the operation of the ENERGY STAR Buildings Program. (Contact: Green Light/Energy Star Hotline at 1-888-STAR-YES or Maria Tikoff Vargas, EPA Program Director at 202-233-9178 or visit the ENERGY STAR Buildings Program website at <http://www.epa.gov/appdstar/buildings/>)

VIII.B.4. Green Lights Program

EPA's Green Lights program was initiated in 1991 and has the goal of preventing pollution by encouraging U.S. institutions to use energy-efficient lighting technologies. The program saves money for businesses and organizations and creates a cleaner environment by reducing pollutants

released into the atmosphere. The program has over 2,345 participants which include major corporations, small and medium sized businesses, federal, state and local governments, non-profit groups, schools, universities, and health care facilities. Each participant is required to survey their facilities and upgrade lighting wherever it is profitable. As of March 1997, participants had lowered their electric bills by \$289 million annually. EPA provides technical assistance to the participants through a decision support software package, workshops and manuals, and an information hotline. EPA's Office of Air and Radiation is responsible for operating the Green Lights Program. (Contact: Green Light/Energy Star Hotline at 1-888-STARYES or Maria Tikoff Vargar, EPA Program Director, at 202-233-9178 the)

VIII.B.5. WasteWi\$e Program

The WasteWi\$e Program was started in 1994 by EPA's Office of Solid Waste and Emergency Response. The program is aimed at reducing municipal solid wastes by promoting waste prevention, recycling collection and the manufacturing and purchase of recycled products. As of 1997, the program had about 500 companies as members, one third of whom are Fortune 1000 corporations. Members agree to identify and implement actions to reduce their solid wastes setting waste reduction goals and providing EPA with yearly progress reports. To member companies, EPA, in turn, provides technical assistance, publications, networking opportunities, and national and regional recognition. (Contact: WasteWi\$e Hotline at 1-800-372-9473 or Joanne Oxley, EPA Program Manager, 703-308-0199)

VIII.B.6. NICE³

The U.S. Department of Energy is administering a grant program called The National Industrial Competitiveness through Energy, Environment, and Economics (NICE³). By providing grants of up to 45 percent of the total project cost, the program encourages industry to reduce industrial waste at its source and become more energy-efficient and cost-competitive through waste minimization efforts. Grants are used by industry to design, test, and demonstrate new processes and/or equipment with the potential to reduce pollution and increase energy efficiency. The program is open to all industries; however, priority is given to proposals from participants in the forest products, chemicals, petroleum refining, steel, aluminum, metal casting and glass manufacturing sectors. (Contact: <http://www.oit.doe.gov/access/nice3>, Chris Sifri, DOE, 303-275-4723 or Eric Hass, DOE, 303-275-4728)

VIII.B.7. Design for the Environment (DfE)

DfE is working with several industries to identify cost-effective pollution prevention strategies that reduce risks to workers and the environment. DfE helps businesses compare and evaluate the performance, cost, pollution prevention benefits, and human health and environmental risks associated with existing and alternative technologies. The goal of these projects is to encourage businesses to consider and use cleaner products, processes, and technologies. For more information about the DfE Program, call (202) 260-1678. To obtain copies of DfE materials or for general information about DfE, contact EPA's Pollution Prevention Information Clearinghouse at (202) 260-1023 or visit the DfE Website at <http://es.inel.gov/dfe>.

VIII.C. Trade Association/Industry Sponsored Activity

The trade associations that represent the water transportation industry are a valuable source of economic and environmental compliance data. The following subsections list major water transportation trade organizations and highlight environmental initiatives sponsored by some of these groups.

VIII.C.1. Global Environmental Management Initiative

The Global Environmental Management Initiative (GEMI) is made up of a group of leading companies dedicated to fostering environmental excellence by business. GEMI promotes a worldwide business ethic for environmental management and sustainable development to improve the environmental performance of business through example and leadership. In 1994, GEMI's membership consisted of about 30 major corporations.

VIII.C.2. National Pollution Prevention Roundtable

The National Pollution Prevention Roundtable published The Pollution Prevention Yellow Pages in September 1994. It is a compilation of information collected from mail and telephone surveys of state and local government pollution prevention programs. (Contact: Natalie Roy 202-543-7272). State programs listing themselves as having expertise in pollution prevention related to water transportation were not identified in The Pollution Prevention Yellow Pages; however, areas of expertise are listed as SIC categories which do not include a specific category for water transportation.

VIII.C.3. ISO 14000

ISO 14000 is a series of internationally-accepted standards for environmental management. The series includes standards for environmental management systems (EMS), guidelines on conducting

EMS audits, standards for auditor qualifications, and standards and guidance for conducting product life cycle analysis. Standards for auditing and EMS were adopted in September 1996, while other elements of the ISO 14000 series are currently in draft form. While regulations and levels of environmental control vary from country to country, ISO 14000 attempts to provide a common standard for environmental management. A strength of ISO 14000 is that it provides a common standard for evaluating a company's environmental management system. A weakness is that the standard does not require a company to achieve a standard of environmental performance (e.g., level of pollution or regulatory compliance) in order to be registered as ISO 14000 conformant. The governing body for ISO 14000 is the International Organization for Standardization (ISO), a worldwide federation of more than 110 country members based in Geneva, Switzerland. The American National Standards Institute (ANSI) is the United States representative to ISO.

VIII.D. Summary of Trade Associations

American Association of Port Authorities
1010 Duke Street
Alexandria, VA 22314-3512
703-684-5700

The American Association of Port Authorities (AAPA) is the alliance of ports of the Western Hemisphere. The Association promotes the common interests of the port community and provides leadership on trade, transportation, environmental and other issues related to port development and operations. AAPA furthers public understanding of the essential role fulfilled by ports within the global transportation system. The Association serves as a resource to help members accomplish their professional responsibilities. APPA produces a bi-monthly newsletter and other publications, as well as conducts several seminars and conferences.

American Bureau of Shipping
Two World Trade Center
106th Floor
New York, New York 10048
212-839-5000

The American Bureau of Shipping (ABS) establishes standards for the design and construction of ships and other marine structures. By administering these standards, ABS also determines the structure and mechanical fitness of a vessel for its intended service.

American Institute of Marine Underwriters
14 Wall Street
Suite 820
New York, New York 10005
212-233-0550

The American Institute of Marine Underwriters (AIMU) is an association of insurance companies that write the majority of ocean marine insurance in the United States.

The American Society of Naval Engineers
1452 Duke Street
Alexandria, VA 22314-3458
703-836-6727

The American Society of Naval Engineers (ASNE) serves all engineers engaged in the design, construction, operation, and repair of ships and their installed systems. ASNE members are concerned with research, logistics support, the management of ship acquisition, and all other disciplines involved in the naval engineering field.

American Waterways Operators
1600 Wilson Boulevard
Suite 1000
Arlington, VA 22209
703-841-9300

The American Waterways Operators (AWO) is the national association representing the inland and coastal tugboat, towboat, and barge industry. Organized in Washington, D.C. in 1944 as the national trade association representing the inland barge and towing industry, AWO expanded its mission and scope in 1969 to include the coastal sector of the community. AWO is now comprised of more than 350 member companies, including bulk commodities transporters; shipdocking and harbor services operators; fueling, bunkering, and lighting services operators; shipyards; and affiliated service members.

Independent Liquid Terminal Association
1133 15th Street, NW
Suite 204
Washington, DC 20005
202-659-2301

Members operate deepwater and barge terminals for the storage of chemicals, petroleum, fertilizers, and basic bulk liquid food products, such

as animal fats and vegetable oils, molasses, and spirits. Objectives of the association are to: 1) advise members of pending legislation and regulations and to respond to these proposals, 2) provide and facilitate the exchange of information among operators, and 3) promote the safe and efficient handling of an increasing variety of liquid products.

Intermodal Association of North America
7501 Greenway Center Drive
Suite 720
Greenbelt, MD 20770-3514
(301) 982-3400

The Intermodal Association of North America is the leading industry trade association representing the combined interests of intermodal freight transportation companies. Its 680 member companies include railroads, intermodal truckers and highway motor carriers, intermodal marketing companies, water carriers and stacktrain operators, and industry equipment and service suppliers.

Lake Carriers' Association
614 Superior Avenue, West
915 Rockefeller Building
Cleveland, OH 44113-1383
216-621-1107

The Lake Carriers' Association is the trade association representing U.S.-flag vessel operators on the Great Lakes. The association is made up of 14 American companies that operate 59 U.S.-flag self-propelled vessels and integrated tug/barge units. In promoting the common interests of its members and their customers, LCA places special importance on legislative and regulatory matters. To facilitate a broad-based understanding of U.S.-flag shipping and its role in the nation's economy, LCA compiles statistical information on ships in service and the volume of cargo movement.

National Association of Waterfront Employees
2011 Pennsylvania Ave., NW
Suite 301
Washington, DC 20006
(202) 296-2810

The National Association of Waterfront Employees (NAWE), formerly the National Association of Stevedores, is a Washington, D.C.-based trade association whose purpose is to promote, further, and support the privately-owned (non-government) stevedoring, marine terminal, and related

industries of the United States, its territories and possessions. Member companies do business at over 110 U.S. ports on the Atlantic and Pacific coasts, the Gulf of Mexico, the Great Lakes, the States of Alaska and Hawaii, and the Commonwealth of Puerto Rico.

NAWE serves as a clearinghouse for industry information; provides a forum for members to exchange ideas and discuss mutual concerns; gives legal and technical help and advice to members; and acts as a spokesman to explain the industry, its concerns and its interests before Congress, federal agencies, and other groups and associations.

National Cargo Bureau, Inc.
30 Vesey Street
New York, New York 10007
212-571-5000

The National Cargo Bureau, Inc. promotes the safety of life at sea through the inspection and certification of shipboard cargo handling gear and the safe loading, stowage, securing, and unloading of cargo on all vessels. NCB promotes and enforces the application of uniform standards designed to protect cargo, vessels, and personnel.

The National Industrial Transportation League
1700 N. Moore Street
Suite 1900
Arlington, VA 22209-1904
703-524-5011

The National Industrial Transportation League (NITL) is a shippers' association that represents businesses of all sizes and commodities using all modes of transportation to move their goods in interstate and international commerce.

National Waterways Conference, Inc.
1130 17th Street, NW
Washington, DC 20036
(202) 296-4415

The National Waterways Conference, Inc. works to ensure the wisest management of America's waterways. The Conference brings together farming, mining, manufacturing, refining, shipping, and other economic sectors that rely on ports, waterway transportation, and flood protection. Leaders of nearly 400 businesses, industries, cooperatives, state and local public agencies, utilities, ports, and terminals actively participate in the conference.

Passenger Vessel Association
808 17th Street, NW
Suite 200
Washington, DC 20006
202-785-0510

The Passenger Vessel Association (PVA) is comprised of the operators and suppliers of U.S. flagged commercial vessels that carry passengers for hire. PVA has an active government relations program, conducts an annual convention and regional meetings, and produces a newsletter and other publications.

Transportation Institute
5201 Auth Way
Camp Springs, MD 20746
301-423-3335

The Transportation Institute is dedicated to maintaining a strong American merchant marine and a fully integrated national transportation network. The institute is composed of American-flag shipping companies engaging in the nation's foreign and domestic shipping trades and in barge and tugboat operations.

United States Chamber of Shipping
900 19th, Street, NW
Suite 850
Washington, DC 20006
(202) 775-4399

The United States Chamber of Shipping (USCS) represents 21 U.S.-based companies which own, operate, or charter oceangoing tankers, container ships, and other merchant vessels engaged in both the domestic and international trades. USCS also represents other entities which maintain a commercial interest in the operation of such oceangoing vessels.

IX. RESOURCE MATERIALS/BIBLIOGRAPHY

For further information on selected topics within the water transportation industry, a list of publications is provided below.

General Profile

American Waterways Operators, and the National Association of the Inland and Coastal Tug and Barge Industry. Some Facts You should Know From America's Inland and Coastal Barge and Towing Industry.

Dun & Bradstreet. Market Marketing Center. www.dnb.imarketinc.com/anly/reports. April 1997

Eno Transportation Foundation, Inc. Transportation in America. 1994.

U.S. Corps of Engineers. The U.S. Waterway System-Facts. December 1996

U.S. Corps of Engineers. Waterborne Commerce Statistics Center. www.usace.army.mil.

U.S. Department of Transportation. Report to Congress on the Status of the Public Ports of the United States 1990-1991. Maritime Administration. December 1992.

U.S. Environmental Protection Agency. 1993 Screener Questionnaire of the Transportation Equipment Cleaning Effluent Guidelines. Office of Water, Engineering and Analysis Division. Washington, D.C. 1994.

U.S. Environmental Protection Agency. Enforcement and Compliance Assurance Accomplishments Report, FY 1995. Office of Enforcement and Compliance Assurance (EPA-300-R-96-006). 1996.

U.S. Environmental Protection Agency. Enforcement and Compliance Assurance Accomplishments Report, FY 1994. Office of Enforcement and Compliance Assurance (EPA-300-R-95-004). 1995.

U.S. Environmental Protection Agency. Enforcement Accomplishments Report, FY 1993. Office of Enforcement (EPA/300-R94-003). 1994.

U.S. Environmental Protection Agency. Enforcement Accomplishments Report, FY 1992. Office of Enforcement (EPA/230-R93-001). 1993.

U.S. Environmental Protection Agency. Preliminary Data Summary for the Transportation Equipment Cleaning Industry. Office of Water Regulations and Standards. Washington, DC. September 1989.

U.S. Office of Management and Budget. Standard Industrial Classification Manual. Executive Office of the President. Washington, DC. 1987.

Process Descriptions

Anonymous. "Types of Pollutants Encountered." In Oil Transportation by Tankers: An Analysis of Marine Pollution and Sanitary Waste. Office of U.S. Congress.

Brummage, K.G. "What is Marine Pollution?" In Symposium on Marine Pollution. The Royal Institution of Naval Architects. 1973.

Clean Water Trust. "Current Clean Water Trust Projects." www.boatus.com/cwtcurr.htm.

Florida Department of Environmental Protection. Florida "Clean Marina:" Draft Best Management Practices (Version 3). Office of Waterway Management. www.dep.state.fl.us/law/clean-marina/bmps/bmpbk3.html.

Florida Department of Environmental Protection. Florida Clean Marina Program Development. Office of Waterway Management. www.dep.state.fl.us/law/clean-marina/papers/imipaper.html.

International Maritime Organization. Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk. London, England. 1980

Kemp, P. (Editor). Encyclopedia of Ships and Seafaring. Crown Publishers, Inc. New York. 1980.

National Research Council. MRIS Report: A Synthesis of Current Information on Treatment and Disposal of Vessel Sanitary Wastes. National Academy of Sciences--National Academy of Engineering. Washington, DC. July 1971.

Rhode Island Coastal Resources Center. Environmental Guide for Marinas: Controlling Nonpoint Source and Storm Water Pollution in Rhode Island --Best Management Practices for Marinas. www.seagrant.gso.uri.edu/riseagrant/waste-source.html.

U.S. Department of Transportation. Report on Port and Shipping Safety and Environmental Protection (Quarterly Report Number 36). Maritime Administration. July 1995.

U.S. Department of Transportation. The U.S. Stevedoring and Marine Terminal Industry. Maritime Administration. January 1993.

U.S. Environmental Protection Agency. Guides to Pollution Prevention: The Marine Maintenance and Repair Industry. Office of Research and Development (EPA/625/7-91/015). October 1991.

U.S. Government Accounting Office. Maritime Industry: Cargo Preference Laws--Estimated Costs and Effects (Chapter Report, November 30, 1994, GAO/RCED-95-34).

Unknown.. Marine Environmental Engineering Handbook.

Unknown. "Safety Guidelines for Tank Vessel Cleaning Facilities." American Waterways Shipyard Conference. Arlington, Virginia. June 1992.

Regulatory Profile

Congressional Research Service. CRS Report for Congress: Summaries of Environmental Laws Administered by the Environmental Protection Agency. 93-53 ENR. January 14, 1993.

Environmental Law Institute. Environmental Law Deskbook. Washington, DC. 1989.

International Maritime Organization. The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 .
hanara.kmaritime.ac.kr/~soonkap/imo/Marpol.htm#Bkground.

Additional Pollution Prevention Resources

Fact Sheet - FCAD-1. California, Plus Fact Sheet - Minnesota and Michigan FM10-2-9. Office of Research and Development, 1990.

Guides to Pollution Prevention - The Mechanical Equipment Repair Industry , Office of Research and Development, EPA/625/R-92/008. September, 1992.

Guide to Cleaner Technologies - Cleaning and Degreasing Process Changes , Office of Research and Development, EPA/625/R-93/017, February 1994.

Guide to Cleaner Technologies - Alternatives to Chlorinated Solvents for Cleaning and Degreasing, Office of Research and Development, EPA/625/R-93/016, February 1994.

Project Summary - Onsite Solvent Recovery, Office of Research and Development, EPA/600/SR-94/026, March 1994.

Guide to Cleaner Technologies - Organic Coating Replacements , Office of Research and Development, EPA/600/R-94/006, September 1994.

Guide to Cleaner Technologies - Alternative Metal Finishes , Office of Research and Development, EPA/625/R-94/007, September 1994.

Project Summary - Pollution Prevention Opportunity Assessment , U.S. Coast Guard Aviation Training Center, Mobile, AL. Office of Research and Development, EPA/600/SR-94/156, September 1994.

Project Report - NASA Langley Research Center and Tidewater Interagency Pollution Prevention Project Program. Office of Research and Development, EPA/600/R-94/171, September 1994.

Project Summary - Pollution Prevention Opportunities Assessment , U.S. Naval Base, Norfolk Naval Air Station, Office of Research and Development, EPA-600/SR-95/135, September 1995.

Environmental Research Brief - Pollution Prevention Assessment of Manufacturing of Aircraft Landing Gear . Office of Research and Development, EPA 600-S-95/032, August 1995.

Program Summary - Parts Washing Alternatives Study , U.S. Coast Guard, Office of Research and Development. EPA-600-SR-95/006, February 1995.

Demonstration of Alternative Cleaning Systems , Office of Research and Development, EPA/600/R-95-120, August 1995.