

4. SPECIAL PROJECTS AND REPORTS

A. Environmental Compliance for the Water Transportation Industry (EPA)

The U.S. Environmental Protection Agency (EPA) has developed a checklist and workbook for evaluating facility compliance with the federal environmental regulations that are applicable to the water transportation industry. Dated August 2000 and titled *Environmental Screening Checklist and Workbook for the Water Transportation Industry*, this EPA document (EPA 305-B-00-004) was developed as a public service to water transportation facilities. The checklist and workbook highlight important or key environmental requirements as they apply to the various federal environmental programs. The term “facility” refers to, but is not limited to, the shipping port, shipping sites, terminals, ships, towboats, and barges, which are overseen by owners/operators, tenants, managers, and field personnel who engage in water transportation operations. If problems with environmental compliance are discovered while completing the checklist, a more comprehensive facility self-audit may be conducted.

Following an introduction, the checklist and workbook address the following topics: (1) waste management, e.g., hazardous waste management, used oil and used filters, used rags/shop towels, absorbents, used batteries, metal scraps, used antifreeze, and PCB-containing equipment; (2) wastewater and storm water management, e.g., wastewater and storm water management at water transportation facilities, activities generating wastewater and/or storm water, and sludge management; (3) dockside maintenance and repair activities, e.g., cargo loading and off loading, painting and paint removal operations, facility renovation/demolition (asbestos concerns), air conditioning maintenance, fueling operations, equipment cleaning and spent solvents, disposal of dredged and fill material, and pesticides; (4) storage tanks and spill prevention, control, and countermeasures, e.g., underground storage tanks, aboveground storage tanks, spill prevention, control, and countermeasures and emergency response; (5) planning and accidental release reporting, e.g., planning and reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA), the Resource Conservation and Recovery Act (RCRA) contingency plan, the Oil Pollution Act (OPA) facility response plan, and the Clean Air Act (CAA) risk management plan; and (6) vessels and underway activities, e.g., marine pollution, ocean dumping, discharging on shore to water transportation facilities, and pollution prevention.

The section concerning vessels and underway activities includes requirements for vessel activities. While these operations are not necessarily applicable to water transportation facilities, they may be of interest as vessel activities have the potential to impact water transportation

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B. Crime and Security in U.S. Seaports (Customs/Justice/MARAD)

On April 27, 1999, President Clinton signed an Executive Memorandum directing the establishment of the Interagency Commission on Crime and Security in U.S. Seaports. Seaports are a key component of the nation's borders and serve as gateways for international commerce. As barriers to trade and travel are reduced and volumes of international cargo and passengers continue to grow, opportunities for criminals to exploit or disrupt maritime commerce increase as well. In the absence of effective security and border control measures, U.S. seaports will be at risk from criminals trafficking in drugs, illegal migrants, weapons, and other contraband, and from fraud, theft, and terrorism.

The Interagency Commission is co-chaired by the Customs Service, U.S. Department of the Treasury, the U.S. Department of Justice, and the Maritime Administration (MARAD), U.S. Department of Transportation (DOT). The Commission also includes senior officials of: the U.S. Departments of State, the Treasury, Defense, Agriculture, Commerce, Labor, Health and Human Services, and Transportation (Coast Guard); the Environmental Protection Agency; the Office of Management and Budget; the Office of National Drug Control Policy; the Central Intelligence Agency; the National Security Council; and the Joint Chiefs of Staff.

The Commission has issued a report, dated August 2000, which identifies threats to seaports and recommends a number of measures aimed at reducing the vulnerability of maritime commerce and the infrastructure that supports it. Adoption of these measures, consistent with the budget environment and other initiatives underway and introduced in an atmosphere of public and private sector cooperation, will support the projected rapid growth in trade while reducing crime and enhancing national security.

Among the report's recommendations are the following:

1. Strengthen interagency, intergovernmental, and public/private sector efforts to address the threats of seaport crime (including terrorism), and to enhance control of imports and exports through seaports.
2. Strengthen the efforts of the Marine Transportation System (MTS) national

4. Evaluate the feasibility of capturing data on cargo theft offenses (including cargo thefts taking place outside of seaports) through the National Incident-Based Reporting System.
5. Prepare, on an annual basis, comprehensive interagency crime threat assessments for seaports with international trade to support coordinated operational planning and enforcement activities as appropriate.
6. Promote enactment as soon as possible of the 21st Century Law Enforcement and Public Safety Act, which includes proposals for the creation of new criminal violations and enhanced penalties related to seaport crime.
7. Intensify the federal government efforts to assist seaports in preparing for the possibility of terrorist acts directed at critical infrastructure.
8. Develop and propose new regulations to create a secure area in seaports where international passengers or passengers from foreign countries disembark.
9. Proceed with the U.S. Immigration and Naturalization Service Seaport Reengineering System Pilot Program for managing risk with respect to the admissibility of passengers and crew at the nation's seaports.
10. Establish, to the maximum extent possible, shared dockside inspection facilities at seaports for use by relevant agencies.
11. Undertake a comprehensive initiative to improve cargo import procedures and related efforts to target seaport crime.
12. Strengthen the export enforcement programs, while preserving export facilitation.
13. Create, under the Marine Transportation System initiative, national-level security subcommittees of the Interagency Committee on the Marine Transportation System (ICMTS) and the Marine Transportation System National Advisory Council (MTSNAC).
14. Develop, through the proposed national-level security subcommittee: (a) voluntary minimum security guidelines for U.S. seaports and their users that are linked to existing Coast Guard Captain of the Port controls of maritime trade; and (b) a model

16. Strengthen, through the National Port Readiness Network, the planning and coordination for military mobilization security at each Strategic Seaport.
17. Establish local Port Security Committees at seaports to discuss and develop solutions for port-specific security issues.
18. Improve information (including intelligence) collection, integration, and dissemination at seaports.
19. Work internationally to strengthen global seaport security.
20. Consider initiation, through the new proposed national-level security subcommittee, of a comprehensive, interagency study to analyze the impact of current projections related to seaport crime, trade volumes, technology, and other key factors on future personnel requirements of federal agencies having border control responsibilities at seaports.

The report is available on the Internet Web Site of the Interagency Commission on Crime and Security in U.S. Seaports: <http://www.seaportcommission.gov>.

C. Greenhouse Gas Emissions from Ships (IMO/MEPC)

At its 42nd session, the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) considered matters related to the reduction of greenhouse gas (GHG) emissions from ships and instructed the IMO secretariat to initiate an IMO study of this issue. The study was performed by a consortium run by MARINTEK (Norway), in partnership with Det Norske Veritas (Norway), the Centre for Economic Analysis (Norway), and Carnegie-Mellon University (United States). The objective of the study was to undertake an examination of GHG emission reduction possibilities through different technical, operational, and market-based approaches. The final report to the IMO, *Study of Greenhouse Gas Emissions from Ships*, was received by the IMO Secretariat on March 31, 2000, and submitted to the 45th session of the MEPC (October 2-6, 2000) for consideration.

Among the report's conclusions are the following:

1. The world consumption of marine bunker fuel was established by the use of different sources. The different sources are inconsistent and indicate a number of errors in the

3. The impact of ship NO_x emissions on local and regional air quality (pollution) will continue to be the dominant policy driver, and may motivate additional domestic and international policy action. However, as scientific research furthers the understanding of global climate effects, policy decisions may increasingly focus on these global issues. Improved assessments of global climate impacts from shipping will need to include the effects of CO₂, NO_x, and SO_x emissions from ships. The research needed includes additional long-term field activities to measure O₃ and NO_x in the remote marine boundary layer and troposphere.
4. A potential for reduction of GHG emissions through technical and operational measures has been identified. Measures related to hull and propeller are identified as general measures for energy savings. Measures related to machinery are identified in a variety of options. The various options have varying effects on reduction of different components of emissions, which imply that reduction of one component may be a trade-off with increased emissions of another component.
5. Technical and operational measures have a limited potential for contributing to reduced emissions from ships. If the increase in demand for shipping services and the market requirement for increased speed and availability continue, technical measures alone will not be able to prevent a total growth in emissions from ships.
6. Shipping has been confirmed to be a significant contributor in the development of environmentally sustainable transport. Although emissions for some components may be above the level for other means of transportation, energy consumption is still a strong factor promoting seaborne transportation in an intermodal transportation chain.
7. Shipping is a small contributor to the world CO₂ emissions (1.8% of world total CO₂ emissions in 1996). This implies that a 10% reduction in emissions from shipping represents less than 0.2% reduction of the world total emissions. The report documents areas where shipping may contribute to moderate reductions of emissions with moderate costs.
8. Significant potential for reduction of emissions from shipping based on operational measures has been identified. Based on the market mechanisms in shipping, implementation of the defined operational measures will most likely require participation from others than the ship owners.

GHG emissions could be feasible: (a) explore the interests for entering into voluntary agreements on GHG emission limitations between the IMO and the ship owners, or for using environmental indexing; (b) start working on how to design emission standards for new and possibly also for existing ships; and (c) pursue the possibilities of credit trading resulting from additional abatement measures implemented on new and possibly also on existing vessels.

For further information, contact Mr. Roar Frode Henningsen, Norwegian Marine Technology Research Institute (MARINTEK), Trondheim, Norway, or the IMO Secretariat, International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom, (phone: 44 (0)20 7735 7611).

D. Watershed Approach to Federal Land and Resource Management (USDA, et al.)

On October 18, 2000, (65 FR 62566), the U.S. Departments of Agriculture (USDA), Commerce (DOC), Defense (DOD), Energy (DOE), and the Interior (DOI), the Environmental Protection Agency (EPA), the Tennessee Valley Authority (TVA), and the Army Corps of Engineers (ACE) promulgated a notice regarding their adoption of a unified federal policy (UFP) on watershed management. This policy, which provides a framework for a watershed approach to federal land and resource management activities, is one of the action items in the President's Clean Water Action Plan (CWAP). More than 800 million acres of the nation's land are managed by federal agencies. These public lands contain significant physical and biological resources and are important for multiple uses, such as drinking water, irrigation, transportation, recreation, and wildlife habitat. Federal land managers are responsible for protecting and restoring these resources.

This policy is intended to accelerate federal progress towards achieving the goals of the Clean Water Act. This policy applies only to federal lands and resources and does not affect water rights laws, procedures, or regulations. It does not supersede or otherwise affect existing state or tribal authority under the Clean Water Act. In international waters, the watershed approach is subject to the international treaties and agreements affecting those waters. The UFP has two goals: (1) use a watershed approach to prevent and reduce pollution of surface and ground waters resulting from federal land and resource management activities and (2) accomplish this in a unified and cost-effective manner.

The following principles are incorporated into the UFP: (1) use a consistent and scientific approach to manage federal lands and resources and to assess, protect, and restore watersheds:

steps to help ensure that federal land and resource management actions are consistent with applicable federal, state, tribal, and local government water quality management programs.

For further information, contact Mr. Eric Janes, Rangelands, Soil and Water Group, Bureau of Land Management, U.S. Department of the Interior, 1849 C Street, NW, Washington, DC 20240, (phone: (202) 452-7752).

E. Ambient Water Quality Criteria (EPA)

On November 3, 2000, (65 FR 66444), the U.S. Environmental Protection Agency (EPA) announced the availability of final revisions to the document titled *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000)*. These revisions are prompted by the many significant scientific advances that have occurred during the past 20 years in such key areas as cancer and noncancer risk assessments, exposure assessments, and bioaccumulation assessments. These revisions are not regulations and do not impose legally-binding requirements on EPA, states, tribes, or the public.

Human health ambient water quality criteria (AWQC) are numeric values for pollutant concentrations in ambient waters considered to be protective of human health. The criteria are developed under section 304(a) of the Clean Water Act (CWA) and are based solely on data and scientific judgments on the relationship between pollutant concentrations and environmental and human health effects. Protective assumptions are made regarding the potential human exposure intakes. These criteria do not reflect consideration of economic impacts or the technological feasibility of meeting the chemical concentrations in ambient water. Section 304(a)(1) of the CWA requires EPA to develop and publish, and from time to time revise, criteria for water quality accurately reflecting the latest scientific knowledge. The criteria are used by states and tribes to establish water quality standards and ultimately provide a basis for controlling discharges or releases of pollutants. The criteria also provide guidance to EPA when promulgating federal regulations under CWA section 303(c) when such actions are necessary.

For further information, contact Ms. Denis R. Borum, Health and Ecological Criteria Division, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, (phone: (202) 260-8996).

F. Air Pollution Reduction Program for Vessels (MARAD)

The goals of this program are as follows:

1. Year 2001: Identify consensus low air emission technologies for demonstration; initiate several best diesel technology demonstrations; establish partnerships for conducting technology demonstrations; and achieve industry outreach and facilitate public information and awareness.
2. Years 2002-2005: Conduct demonstrations of technologies that can reduce marine air polluting emissions on commercial vessels by at least 50 percent.

Current program activities include: (1) developing a 5-year plan to demonstrate low air polluting emission technologies aboard inland and coastal vessels; (2) monitoring exhaust emissions from sister ferries using compressed natural gas and diesel fuel; (3) assessing the feasibility of installing and converting a diesel engine to dual fuel operation; (4) evaluating an integrated highway/ferry system in the San Francisco Bay area to reduce greenhouse gases and air polluting emissions; (5) conducting workshops on alternative fuels for ferries and other marine vessels; (6) seeking partners for vessel demonstrations of best diesel/gas turbine technology, LNG dual fuel technology, and natural gas fuel cell technology; (7) establishing an Internet web site identifying national and international low air polluting emission demonstration projects; and (8) planning a national conference in 2001 to address marine air polluting emissions.

Potential joint industry/government shipboard demonstration projects include: (1) best diesel/gas turbine technology; (2) dual fuel engine operation; (3) conversion of a diesel engine to dual fuel operation using LNG and diesel fuel; (4) natural gas powered fuel cell used for propulsion power aboard a research platform; (5) natural gas powered fuel cell to supply 400 kW of power aboard a commercial vessel; (6) use of other alternative fuels; (7) application of emissions monitoring technology; and (8) application of exhaust treatment systems. Additional activities that may be required to support demonstrations are studies related to transportation economics, air polluting emission reductions, commercial vessel designs, safety and regulations, training, and issues of particular concern to owners and builders.

For further information, contact Mr. Richard Voelker, Division of Advanced Technology (MAR-762), Office of Shipbuilding and Marine Technology, Maritime Administration, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590, (phone: (202) 366-1926), or visit the following Internet Web Site: <http://www.marad.dot.gov/nmrec>.