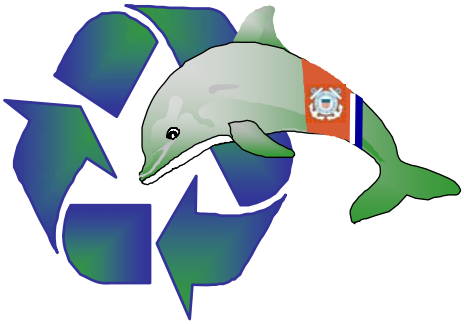
The Commanding Officer's Environmental Guide

(w/ Commandant's 2007 Policy Statement)



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THE COMMANDANT OF THE UNITED STATES COAST GUARD
WASHINGTON, D.C. 20593-0001

MAR 0 2 2007

The Commandant's Environmental Stewardship Commitment

The United States Coast Guard is recognized as America's Maritime Guardian. We have long been charged with enforcing the laws and regulations that protect our country's marine environment, responding to vessel pollution, and restoring waterways following a disaster. As Environmental Stewards, we make a commitment to the American public and to future generations, not only to protect the environment, but also to demonstrate these values in our organization.

To maintain the public's trust, the Coast Guard will incorporate environmental best practices in all we do. We will

Develop an organizational capability to disseminate best practices, reduce environmental liabilities, and help all units achieve and maintain environmental compliance;

Undertake the *Federal Electronics Challenge* for recycling computers and other electronics;

Increase the use of biofuels in our vehicle fleet by 15% over each of the next four years;

Utilize sustainable design principles so that 25% of new construction projects will meet Leadership in Energy and Environmental Design (LEED) standards by the end of my watch;

Fully implement Environmental Management Systems (EMS) at major Coast Guard industrial units by the end of my watch.

I challenge all Coast Guard units to improve the environment, and to reduce our environmental footprint. Do your part, wherever you are within the organization, to make environmental stewardship a Coast Guard core competency.

Semper Paratus,

T.W. ALLEN
Admiral, U.S. Coast Guard

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COMDTPUB 5090.1A

COMMANDANT PUBLICATION P5090.1A

Subj: COMMANDING OFFICER'S ENVIRONMENTAL GUIDE

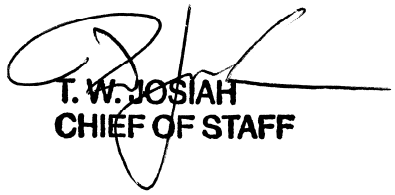
1. PURPOSE. This Publication is a desktop guide to Federal environmental stewardship requirements for commanding officers and officers in charge of Coast Guard shore units, vessels and aircraft. The document contains information on requirements to ensure environmental compliance at our units, prevent future environmental damage from our actions, remedy current environmental damage from our past practices, and prepare to respond to accidental environmental damage that may result from contingencies.

2. ACTION. Area and district commanders, commanders of maintenance and logistics commands (MLCs), and commanding officers of headquarters units shall ensure that they and their unit commanders are aware of the contents of this Publication.

3. DIRECTIVES AFFECTED. This desktop guide replaces the COMDTPUB P5090.1.

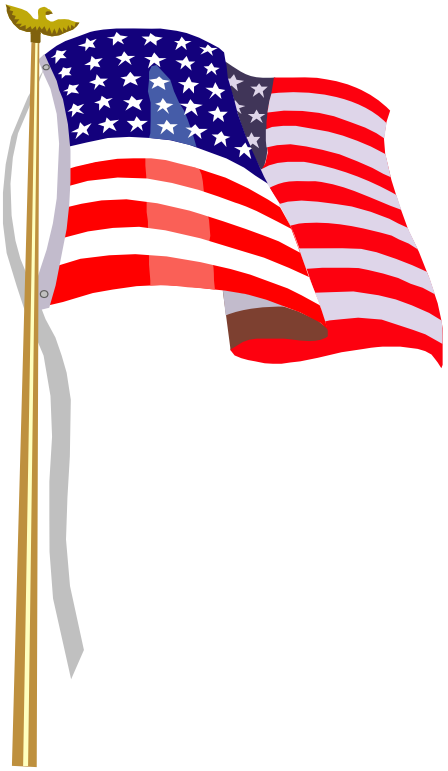
4. DISCUSSION. Per Coast Guard requirements, commanding officers and officers in charge are responsible for compliance with all applicable environmental laws and regulations at their units. As stated in the "Commandant's Environmental Stewardship Challenge", the Coast Guard has a special duty to ensure that we use our limited natural resources wisely and minimize the environmental impact of our operations. Carrying out our missions and operation our facilities in an environmentally conscious manner contributes to overall operational and cost efficiency and limits the risks of creating long-term environmental liability for the American people. By recognizing our stewardship responsibilities and complying with applicable regulations, we can accomplish our vital Coast Guard missions while preserving the earth's precious natural resources for the future.

5. PROCEDURES. This Publication is a training, education and awareness document for unit commanders on environmental laws and regulations that are most likely to affect their unit. It is also a "primer" on environmental stewardship requirements for staff officers and personnel who are confronted with environmental issues.



T. W. JOSIAH
CHIEF OF STAFF

All About This Guide...



This Commanding Officer's Environmental Guide is a desktop manual, a "primer" on your environmental duties, responsibilities, and potential liabilities. Since the mid-1970s the pace of change in environmental laws and regulations has been accelerating at a phenomenal rate. This guide cannot contain all of the environment-related information you need to know as a Commanding Officer. However, it provides a level of detail needed for basic knowledge of key environmental issues and provides lists of resources where additional information can be found. It is structured around issues Commanding Officers need to be aware of. As always, unit hazardous waste and pollution prevention coordinators, servicing environmental support staff in the Maintenance and Logistics Commands, and the Headquarters program managers are available to provide the support that Commanding Officers need to carry out the Coast Guard's missions.

This guide is divided into two parts. The first section provides an overview of the Coast Guard's environmental vision for integrating environmental stewardship into its mission and information on the things you, as a Commanding Officer, can do to effectively merge environmental stewardship with your unit's responsibilities. The second section provides an overview of environmental legislation and specific information on environmental topics of concern. This section also provides lists of additional resources for you to reference.

The Coast Guard's missions are undertaken on land, in the air, and on the sea. Afloat commanders are responsible for compliance with many environmental regulations when at sea or moored independently. As a tenant to a host command, afloat commanders must work together with their host command to comply with environmental regulations for which they are responsible. Throughout this guide, information of special interest to Commands Afloat have been indicated by a vessel icon to allow for quick reference.

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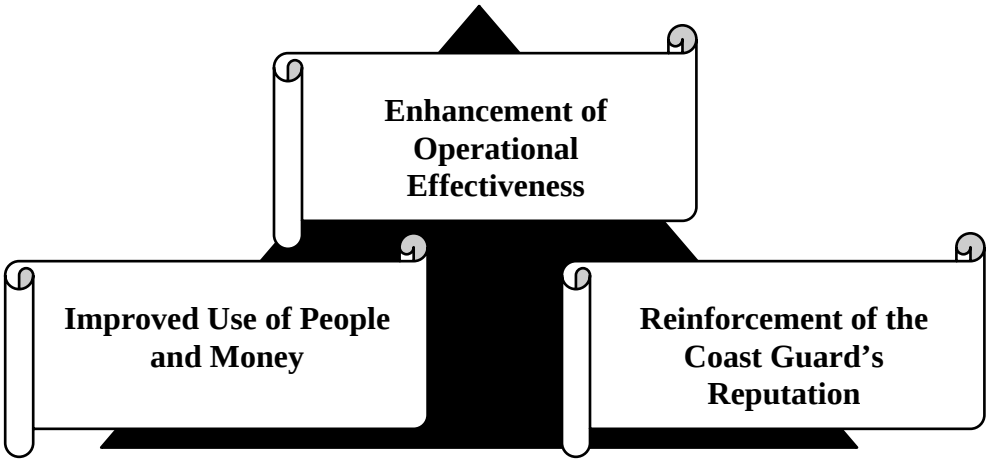
Why Environmental Stewardship is an Important Part of the Coast Guard's Missions

Our business values the environment. Environmental stewardship is not just needed to comply with laws and regulations; it is an essential element of our missions. The quality of our work and the services we provide depend in great part on the integration of environmental values into our daily activities. Obviously, environmental compliance is the law, but improvement in internal environmental stewardship will help us achieve mission success.

There are three primary reasons that environmental stewardship is important to the USCG. Enhancement of Operational Effectiveness, Reinforcement of the Coast Guard's Reputation, and Improved Use of People and Money are all requirements for succeeding at our missions. Reducing regulatory oversight can enhance operational effectiveness. The Coast Guard's reputation can be reinforced with Congress, the regulated commercial vessel community, other Federal and state regulators, and the general public by improving the way the USCG manages its resources. Improvements in efficiencies of environmental stewardship processes will result in improved use of people and money.



Enhancement of Operational Effectiveness

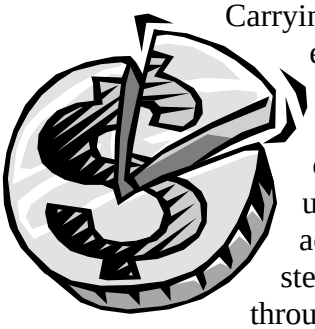
The nature of USCG missions requires us to locate our facilities and operate our vessels and aircraft on and over the waters and sensitive shorelines of the U.S. The entities that we regulate also operate in these same sensitive natural environments. We need the capability to operate wherever and whenever needed. Environmentally sensitive operations enable us to sustain this capability. Many of the Coast Guard's actions, including everything from search and rescue operations to cutter disposal to marine event permitting, have the potential to impact the environment. Environmental stewardship concerns also have potential to impact our activities both nationally and internationally.

Reinforcement of Operational Effectiveness

In order to effectively do our job; the Coast Guard must have credibility with our partners, overseers, and the communities in which the USCG operates. The Coast Guard as a whole must "talk the talk" and "walk the walk."

The Coast Guard reputation as a protector of the natural environment hinges on how we accomplish our environmental stewardship activities. The Coast Guard must demonstrate, through our own actions, the level of sensitivity to environmental matters that we expect from those whom we regulate. We must also demonstrate this to our partners and the communities we protect. An effective environmental stewardship program enhances our stature within the international community and in the communities in which we are corporate citizens. We can find ways to reduce environmental contamination and use innovative techniques to dispose of the wastes we produce; we can protect marine mammals that live in the waters in which we operate; and we can find alternatives for and find less polluting ways to use and store hydrocarbon fuels. In doing these things, and more, we can enhance our status as a world leader in maritime environmental protection.

Improved Use of People and Money



Carrying out our missions and operating our facilities in an environmentally conscious manner contributes to overall operational efficiency and limits the risks of creating long-term environmental liability for the American people. Compliant operations and cost effective environmental stewardship will allow us to use more of our resources to support USGC missions and achieve USCG strategic goals. Investments in environmental stewardship will save time and effort for our people in the long run through avoidance of external relation issues, remediation costs and regulatory fines. These savings will allow funds and personnel power to be redirected toward producing quality products and services to meet the Coast Guard's missions.

The bottom line – Environmental stewardship can provide a positive contribution to the sustainability of the USCG missions and the sustainability of the environment.

IMPLEMENTING THE VISION

By incorporating the following principles into our missions, the Coast Guard can meet its missions and regulatory obligations in the most efficient manner possible, while ultimately producing a quality organization.

- Enhance leadership for internal environmental stewardship through increased accountability and recognition of responsibilities;
- Acknowledge that the USCG's missions are the reason for existence of all parts of the organization;

- Increase partnerships among operations, support, headquarters and the field; and
- Improve collaboration between customers and suppliers in environmental stewardship activities.

The Coast Guard's history as a protector of the natural environment provides us with a strong foundation. However, we must take steps to build on this foundation to achieve a quality-based organization that can be among the best in the nation in environmental stewardship.

What Should I Do As Commanding Officer?

As Commanding Officer, or Officer in Charge, you are responsible for ensuring that your unit, whether a shore facility or a cutter, is in continuous compliance with all applicable Federal, state and local environmental laws and regulations and international treaties.

As Commanding Officer, or Officer in Charge, you are responsible for ensuring that your unit, whether a shore facility or a cutter, is in continuous compliance with all applicable Federal, state and local environmental laws and regulations, and international treaties. To fulfill this responsibility, you must develop a strong, active environmental program at your unit. This program includes providing adequate resources and training for your staff. You must also place the proper emphasis on the environmental program at all staff levels.

Remember, you may be liable for improper environmental stewardship in your Command. Coast Guard Commanding Officers and other Federal employees may be subject to civil and criminal penalties and may be prosecuted for environmental offenses. You should note that in addition to Federal laws and regulations, state and local regulations may be stricter or there may be additional regulations to which your Command must comply.

Part III, Important Environmental Topics, provides additional information on your environmental requirements. The recommendations listed in the following section are not exclusive; always be on the lookout for ways to ensure that your Command is in compliance and to identify new laws and regulations with which you must comply.

Everyone Should...

Regardless of your command (a shore unit, a cutter, an administrative office), or if you are operating within the U.S., its territories or overseas, environmental stewardship affects your mission and your command. Remember that the execution and success of your unit's environmental program requires the full commitment of every person assigned to your unit, not just personnel specifically charged with environmental duties.

As a Commanding Officer you should:

- Promote the philosophy that environmental protection and compliance are a part of the Coast Guard mission, not an obstacle to it.

- Ensure that environmental compliance requirements are integrated into all levels of unit management through training, funding, inspection, oversight, identification, and mitigation.

- Be well informed of the requirements applicable to your unit(s). Learn what specific environmental laws, regulations, and reporting requirements apply to your unit. Maintain all required records—paperwork violations are the easiest to catch, so inspectors will look for them first.

- Review your unit's actions at least once each quarter; sample inspection questionnaires are included at the back of this guide. Be observant, ask questions about environmental activities, and recognize whether or not environmental activities are being properly undertaken.

- Obtain briefings from your servicing environmental staff, whether in-house or in a support command. Larger units may have an in-house environmental staff. All units, large or small, may consult with environmental staff at Civil Engineering Unit (CEU); Integrated Support Command (ISC); Maintenance and Logistics Command (MLC) (v), (s), and (l); Environmental Management Division (G-SEC) (for Headquarters units); Naval Engineering Division (G-SEN); servicing safety and environmental health officials; and legal support office or staff. Remember - these are your primary sources of environmental expertise.

- Ensure your unit is scheduled for an Environmental Compliance Evaluation (ECE) from your civil engineering support organization at least every three years. Get an out-brief on the results. **Follow up to ensure discrepancies are corrected**.

- Establish contact, in consultation with your servicing environmental staff, with Federal, state, and local regulatory agencies and comply with applicable substantive and procedural requirements.

- Investigate suspected violations of environmental law.

- Promptly forward Notices of Violation (NOVs) and Notices of Noncompliance (NONs) to the legal office advising your chain of command (they will copy the appropriate MLC and Headquarters legal staffs), remedy discrepancies, and consult with CEUs and your legal office to negotiate achievable compliance schedules with regulators.

- Don't cover up violations; work with Federal, state, and local regulatory agencies and comply with applicable substantive and procedural requirements.

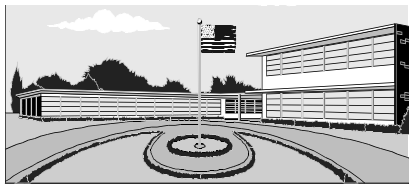
- Implement an effective public relations program through your public affairs officer to complement your environmental program.

- Coordinate important environmental matters, especially violations, agreements, and permit conditions, with the CEUs, ISCs, MLCs, NESU, G-SEN, your servicing legal staff, or G-SEC (for Headquarters' units).

- Keep the operational chain of command informed of any adverse effect regulatory compliance may have on your operations, any violations, and any resource shortages affecting compliance and documentation.

REMEMBER - There are many sources of help available to assist you in meeting your environmental compliance and cleanup responsibilities; see Appendix A.

If You Are Responsible For A Shore Unit...



Shore units encompass a wide variety of functions. As Commanding Officer you are responsible for ensuring that your unit is in compliance with a great number of environmental laws and regulations. The missions for which you are directly responsible, as well as tenant missions, all must be in compliance. To effectively meet this challenge you should:

- Locate and review your most recent ECE. Correct outstanding findings. Request assistance from your servicing CEU if you need help.

- Apply for all Federal, state, and local environmental permits, where required, and coordinate permit requirements with all tenant units of your command.

Inspect your unit on a regular basis and correct all deficiencies identified. Work with your servicing CEU to identify and correct areas that may require environmental remediation.

- Ensure that all petroleum products, hazardous materials and wastes are labeled, stored, and handled in compliance with regulatory requirements.

- Ensure compliance with all reporting and record keeping requirements.

- Review your unit's emergency spill planning, preparedness, and prevention procedures. Know who has authority to implement the procedures and understand your role in the event of an uncontrolled discharge of a regulated substance. Assure drills are conducted to practice implementing the procedures.

- Implement a Pollution Prevention (P2) Plan and identify ways to reduce the use of hazardous substances, reduce hazardous and non-hazardous waste, and conserve resources, including energy and water.

- Identify sensitive natural, historic and cultural resources on or adjacent to your facility; ensure programs are in place to protect these resources from harm.

- Maintain a positive relationship with local community leaders and the general public through a proactive public relations program.

- Coordinate with the cognizant port clearance authority to ensure that replies to Logistics Requests (LOGREQ) fully apprise arriving Coast Guard cutters of local environmental requirements and port practices.

- Prepare, and renew annually, host/tenant agreements establishing responsibilities for proper management and handling of petroleum products, hazardous materials and waste and other environmental compliance matters (the host shore facility is the generator for all tenants, including cutters).

- Consider the potential for environmental impacts from proposed actions or changes in ongoing business practices through environmental planning, before implementing such actions.

If You Are Responsible For A Vessel (Cutter or Boat)...

Vessels continually operate within a sensitive environmental resource - the rivers, bays, and oceans. Among the many laws and regulations for which you are responsible are those which control pollution, hazardous and non-hazardous waste, air quality, water quality, noise, and threatened and endangered species. There are important U.S. and international laws that regulate a vessel's actions. As Commanding Officer of a vessel, you should:

- Be aware of sensitive environmental habitats and animals in the area in which your vessel is operating. Determine what special precautions (such as lookouts, speed restrictions, or training) may be necessary.

- Know the Federal, state, and international regulatory requirements that are in effect in the waters or harbors you visit. Ensure that replies to Logistics Requests (LOGREQ) fully apprise your arriving vessel of local environmental requirements and port practices.

- Manage and dispose of solid waste and sewage in accordance with environmental regulations and Coast Guard policy.

- Implement operating procedures to prevent the discharge of petroleum products, hazardous materials, or waste overboard.

- Ensure all hazardous materials are labeled, handled, and stored in accordance with Occupational Safety and Health Act (OSHA) regulations.

- Know disposal responsibilities of each party, under contract terms, during yard periods and maintenance responsibilities.

- Implement maintenance procedures that prevent the discharge of maintenance byproducts, such as paint chips, overboard.

- Have the contracting officer determine if a contractor's maintenance procedures prevent the discharge of byproducts into the environment.

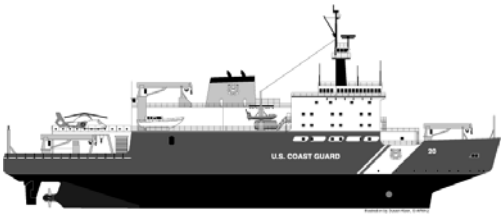
- Ensure compliance with all reporting and record keeping requirements.

- Coordinate with shore facilities to ensure proper ship-to-shore transfer of hazardous substances. Properly label and store substances for transfer, provide Material Safety Data Sheets (MSDS) and complete transfer documents to the shore facility.

- Maintain proper equipment for adequate processing of shipboard oily waste prior to discharge overboard and to allow proper segregation, collection, and ship-to-shore transfer of oily waste.

- Review your cutter's Local Contingency Plan to ensure timely and effective response action to control and remove discharges of oil and releases of hazardous substances.

- Ensure that no medical materials are disposed of in a manner that poses risk or perception of risk to the public health and welfare or to the marine environment.



- Maintain operating equipment to improve fuel efficiency and minimize air emissions.

- Implement operation and maintenance procedures at pierside to prevent stack emissions in violation of state and local regulations.

If You Are Responsible For An Aircraft…

Aircraft, like vessels, often operate in and around sensitive environments and resources. Aircraft have the potential to impact air quality, threatened and endangered species, and the human quality of life. As Commanding Officer of an aircraft, you should…

- Be aware of sensitive environmental habitats and animals in the area in which your aircraft is operating. Determine what special precautions (such as lookouts or training) may be necessary.

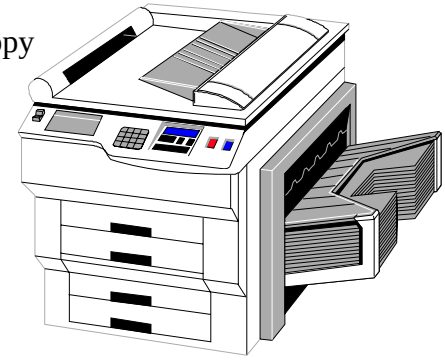
- Maintain operating equipment to improve fuel efficiency and minimize air emissions.

- Be aware that you may be operating in or near areas sensitive to noise impacts such as residential areas; comply with local noise restrictions whenever possible.

If You Are Responsible For An Administrative Or Support Function...

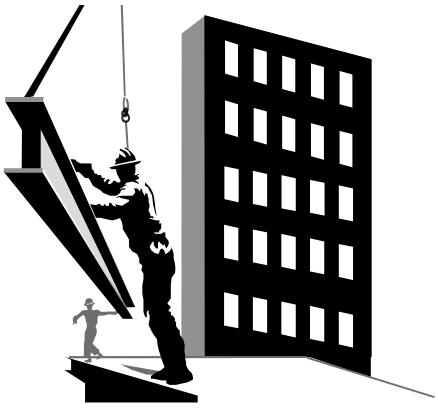
Although you may think administrative offices do not have a direct impact on the environment, natural resources are used and wastes are generated every day in your office. By efficiently using resources and reducing waste, negative impacts on the environment are minimized. Reduced consumption and waste translate into financial savings. The following "green office" practices can be implemented at little to no cost. Practices you should undertake include:

- Send copies of messages, memos, and documents electronically to reduce paper copies.
- Edit documents on-screen rather than printing unnecessary draft copies.
- When purchasing office supplies, order only the quantity needed; if large quantities are needed look for cost and packaging savings by buying in bulk.
- Purchase recycled and environmentally-friendly products for use in your office.
- Purchase refillable/durable products rather than disposable products.
- Repair products rather than replacing them.
- Reuse office supplies such as binders, file folders, and computer diskettes.
- Conserve resources such as energy and water; track their use.
- Turn off lights when not in use.
- Purchase computers, copiers, fax machines, monitors, and printers with the Energy Star logo which denotes that the product meets EPA's energy-efficiency requirements.
- Equip your office with a plain paper fax and photocopiers with energy-saving automatic standby.
- Equip your office with photocopiers with two-sided copy capabilities.
- Encourage aluminum, plastic, and paper recycling.



If You Are Planning A New Project Or Action...

Planning new projects and action requires special focus on environmental issues...



- From the outset of the planning process, identify environmental issues associated with the project or action and work to avoid or minimize impact to environmental resources.

- Identify Federal and state environmental laws and regulations which may affect a proposed project. Among the Federal laws which will guide project planning are the National Environmental Policy Act, National Historic Preservation Act, the Clean Air Act, the Clean Water Act, the Endangered Species Act, the Coastal Zone Management Act, and Section 4(f) of the Department of Transportation Act.

- If purchasing real estate, ensure that an environmental site assessment for potential environmental contamination is conducted.

- Identify opportunities to enhance the environment or reduce environmental impacts and incorporate these actions into your project.

- Incorporate energy conservation techniques into building designs and install energy efficient equipment.

- Incorporate beneficial landscaping design into new projects to reduce future use of water, fertilizer, and pesticides.

- Look for opportunities to incorporate sustainable materials such as plastic lumber made from recycled post-consumer waste, and reuse materials whenever possible.

- Realize that some environmental regulations may require including the local community in the planning and decision making process.

- Be aware that certain environmental laws, such as the National Environmental Policy Act (NEPA), require Federal agencies to document their environmental planning efforts. These documents become part of the administrative record of the project and may need to be a part of the project approval package.

If You Are Responsible For A Coast Guard Facility Overseas...

Though this Guide is geared toward units in the United States, much of the information is still useful to Commanding Officers and Coast Guard personnel stationed in overseas locations. If you are a Commanding Officer or a prospective Commanding Officer of a unit located beyond U.S. territorial boundaries, it is important to:

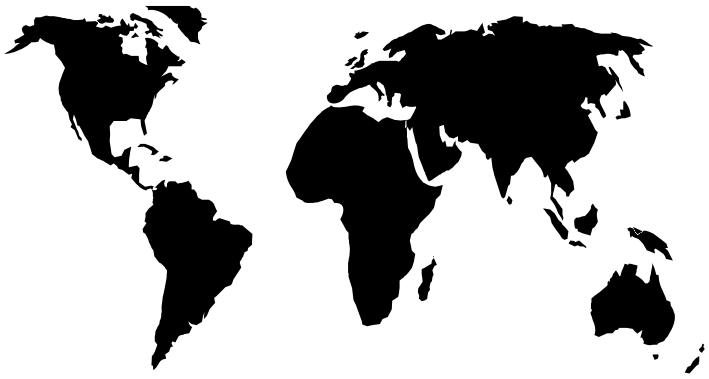
- Understand that the environmental situation of a unit located beyond U.S. territorial boundaries will depend on those requirements and standards set by the host country and Status of Forces Agreements (SOFAs) or Coast Guard policies, whichever are more stringent.

- Remember that Executive Order 12114 (Environmental Effects Abroad of Major Federal Actions) imposes planning requirements analogous to those under the National Environmental Policy Act (NEPA).

- Conduct business in an environmentally safe manner; comply with Coast Guard directives relating to environmental stewardship, as well as occupational health and safety.

- Familiarize yourself with the special regulations that apply to the host country and the particular locality within the country; some may be more stringent than U.S. standards.

- Contact Commandant (G-SEC) or your civil engineering support staff for assistance.



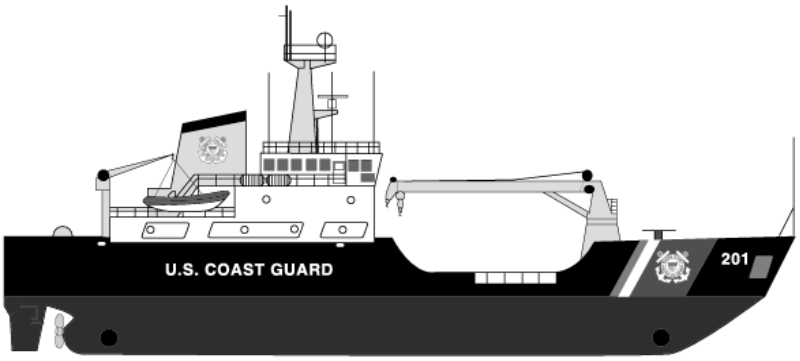
If Your Unit Is Being Decommissioned...

A Commanding Officer's responsibility to comply with environmental laws does not end when the unit is to be decommissioned. Regardless of whether the unit is comprised of real property (such as shore units) or other property (such as ships or aircraft), outstanding environmental liabilities at the unit will need to be reconciled before the Coast Guard can transfer the property or declare it to be excess. Where substantial contamination of the property has occurred, the Coast Guard may need to retain the property for several years after decommissioning, until the contamination is removed or remediated. In the event that your unit is slated for decommissioning, you should:

- Consult with your Maintenance and Logistics Command (MLC) (v), (s), and (l); Civil Engineering Unit (CEU); Environmental Management Division (G-SEC) (for Headquarters' units); or Naval Engineering Division (G-SEN) (for cutters) to ensure that you are in compliance with all Federal, state, and local requirements.

- Identify any potential for unresolved environmental contamination to supporting environmental staff.

- Ensure that environmental records are complete and in proper order.



Part II: Important Environmental Topics

This section can background information on important issues, major environmental programs, as well as current regulations and references.

Topics in this chapter include:

- A Legislative Overview of laws, regulations, and Executive Orders affecting environmental compliance
- Air Emissions Compliance
- Asbestos
- Coastal Zone Management
- Drinking Water
- Emergency Planning and Community Right-To-Know
- Threatened and Endangered Species
- Energy Efficiency
- Environmental Compliance Evaluation
- Environmental Emergencies
- Environmental Justice
- Environmental Restoration
- Floodplains
- Greenhouse Gasses and Global Warming
- Hazardous Waste
- Historic and Cultural Resources
- Infectious Waste
- Landscaping Practices
- Lead
- Liabilities and Penalties
- Marine Mammal Protection Act
- National Environmental Policy Act
- Noise Prevention
- Notice of Violation or Notice of Noncompliance
- Ocean Dumping
- Oil and Hazardous Substance Pollution Contingency Plans
- Ozone Depleting Substances
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- Pollution Prevention and Hazardous Materials
- Polychlorinated Biphenyls (PCBs)
- Public Relations
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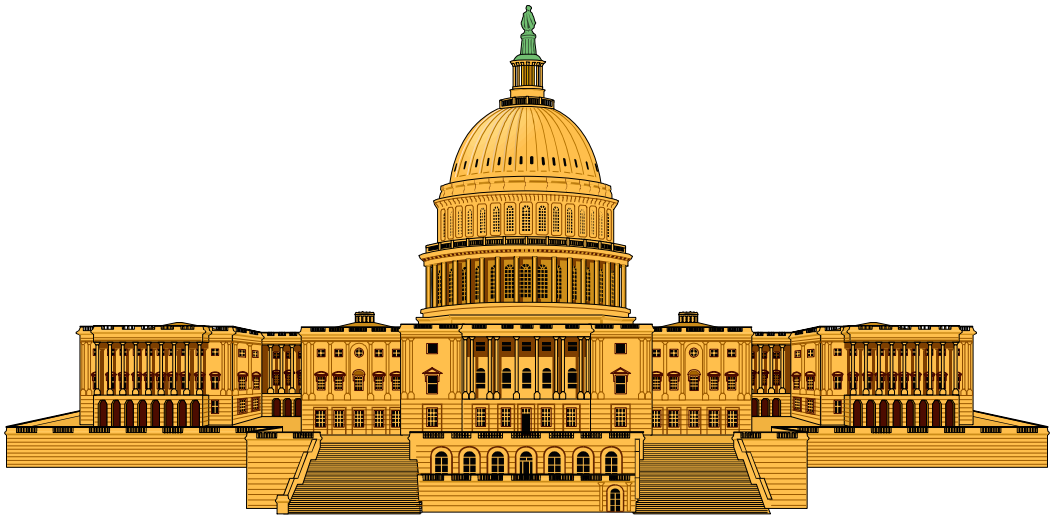
- Reportable Releases
- Reporting and Record Keeping Requirements
- Solid Waste Management
- Threatened and Endangered Species
- Training and Education
- Storage Tank Management
- Uniform National Discharge Standards
- Unit Inspections
- Wastewater/Storm Water Management
- Wetlands

Environmental Compliance

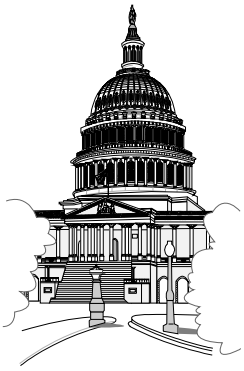
As Commanding Officer, you have ultimate responsibility for overall environmental compliance of your facility.

There are many Federal, state, local, and host nation environmental laws and regulations. Your compliance status can, and often does, vary according to the regulated media. For example your unit could be in compliance with water quality standards, but at the same time could be out of compliance with hazardous waste standards.

While total, continuous, environmental compliance should be your ultimate goal, it is often elusive. Federal, state, and local regulatory agencies play a major role in determining your facility's legal compliance status. This status is normally determined through inspection. However, many environmental regulations are designed to be "self regulating." These regulations require you to monitor your program and to take steps to get into compliance as quickly as possible. This section provides more information on the major Federal environmental laws and regulations with which shore facilities and cutters must comply.



Legislative Overview



Environmental regulations affect virtually every operation throughout your facility, and you are responsible for considering the effects of your proposed actions on the environment. The proliferation of environmental law (particularly within the past two decades) necessitates an increased awareness of responsibility for, and stewardship of, the environment. Federal agencies are responsible for complying with more than 40 environmental statutes and amendments, 34 of which have been passed by Congress within the past 25 years. Reauthorization of existing laws and passage of additional statutes to address newly-recognized requirements for environmental protection are expected to continue into the 21st century. Commanding Officers can expect requirements for environmental compliance to increase in complexity and encompass most, if not all, of the facility's mission and operations.

Most Federal environmental laws are implemented through a series of regulations that are frequently promulgated by the U.S. Environmental Protection Agency (EPA). Additional agencies such as the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), regulate endangered species, and the Advisory Council on Historic Preservation (ACHP) and the National Park Service (NPS) regulate historic preservation. The Army Corps of Engineers (COE) regulates wetlands protection and mitigation. These regulations are then supplemented by Department of Transportation (DOT) and Coast Guard instructions and policies for implementation by individual units. Many laws now waive Federal sovereign immunity and delegate implementation and enforcement authority to the states.

Most Federal environmental regulations are promulgated in response to legislation passed by the U.S. Congress. The principal environmental laws of the last two decades are listed below:

The American Indian Religious Freedom Act (AIRFA) - directs Federal agencies to evaluate their policies and procedures in consultation with Native traditional religious leaders to determine changes necessary to protect and preserve Native American cultural and religious practices.

Archeological Resources and Protection Act (ARPA) of 1979 - requires a permit for any excavation or removal of archeological resources located on Federally-owned property and provides civil and criminal penalties for unauthorized removal, damage, or vandalism of archeological resources located on public lands. The land manager of the Federal property is responsible for issuing permits.

Clean Air Act (CAA of 1970 and Clean Air Act Amendments (CAAA) of 1990 (also referred to as CAA90) - requires prevention, control, and abatement of air pollution

from stationary and mobile sources. This Act also includes asbestos removal and disposal regulations and greatly reduces the use of ozone depleting substances.

Clean Water Act (CWA) of 1972, as amended through 1987 - regulates discharge of pollutants into waters of the U.S. from any point source including industrial facilities and sewage treatment facilities; regulates storm water runoff from certain industrial sources; requires reporting and cleanup of oil and hazardous substance spills in waterways; protects waterways; requires a permit to adversely affect wetlands; and requires spill prevention plans for sites that store petroleum products. Section 404 of the Clean Water Act requires a Corps of Engineers' permit before dredging or filling projects within wetlands. Under Section 401 of the Clean Water Act, a state may require that a water quality certification be obtained in addition to a Section 404 permit.

Coastal Barrier Resources Act - prohibits new Federal expenditures or financial assistance for any purpose within the Coastal Barrier Resources System on or after October 18, 1982. Exemptions will be considered only after consultation with the Secretary of the Interior. USFWS guidelines defining new expenditures and financial assistance and describing procedures for consultation are found in 48 CFR 4866.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 - regulates cleanup of contaminated sites; CERCLA, also known as "Superfund", regulates releases of hazardous substances into the environment.

Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 - requires units to provide local governments with information concerning possible chemical hazards in the community; requires emergency planning for releases of extremely hazardous substances.

Endangered Species Act (ESA) of 1973, as amended - requires that Federal actions not jeopardize, threaten, destroy, or adversely impact the existence of threatened or endangered species or their habitats.

Energy Policy Act of 1992 – requires a 20 percent improvement in energy efficiency at Federal facilities, from Fiscal Year (FY) 85 through FY 2000, and minimization of the use of fossil fuels.

Federal Facilities Compliance Act - see Resource Conservation and Recovery Act of 1976.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1972 - requires the licensing or registration of pesticide products; requires proper management of pesticide use, storage, and disposal.

Hazardous Materials Transportation Act (HMTA) of 1975 - authorized the Department of Transportation to issue interstate and intrastate regulations related to packing, repacking, handling, labeling, marking, placarding, and routing hazardous

materials. In addition, HMTA established record keeping requirements and a registration program for shippers, carriers, and container manufacturers.

Marine Mammal Protection Act (MMPA) of 1972, as amended - provides protection for marine mammals generally, and for species protected by the Endangered Species Act, (i.e., manatees, sea and marine otters, and dugongs). Responsible officials shall identify marine mammals and/or their habitats that may be affected by a Federal action. Any take of a marine mammal is prohibited without a permit from the National Marine Fisheries Service.

National Environmental Policy Act (NEPA) of 1969 - mandates that Federal agencies "utilize a systematic, interdisciplinary approach to insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment." NEPA and its implementing regulations require that a certain level of environmental analysis and documentation be conducted for all Federal actions with the potential to significantly impact the environment. This documentation should be included in every recommendation or report on proposals for legislation.

National Historic Preservation Act (NHPA) of 1966 - requires Federal agencies to consider effects of their actions (i.e., construction, leasing, maintenance, and land transactions) on cultural and historic resources eligible for listing on the National Register of Historic Places.

Native American Graves Protection and Repatriation Act of 1990 - prohibits the intentional removal of Native American cultural items from Federal or tribal lands, except under an ARPA permit and in consultation with the appropriate Native American groups.

Noise Control Act of 1972 - establishes noise standards and regulates noise emissions from commercial products such as transportation and construction equipment.

Oil Pollution Act of 1990 (OPA) - imposes requirements on the Federal government and industry to develop the capability and constant readiness to contain and remove oil spills of all sizes.

Resource Conservation and Recovery Act (RCRA) of 1976 as amended through 1984 by the Hazardous and Solid Waste Amendments (1984) - establishes guidelines and standards for hazardous waste generation, transportation, treatment, storage, and disposal; requires management of underground storage tanks (USTs) and cleanup of hydrocarbon contamination. The Federal Facilities Compliance Act of 1992 requires inspection of Federal facilities for the treatment, storage, or disposal of hazardous waste.

Safe Drinking Water Act (SDWA) of 1974 - regulates drinking water quality with regard to pollutants that may have an adverse effect on human health or negatively affect the aesthetic quality of drinking water.

Toxic Substances Control Act (TSCA) of 1976 - regulates, among others, polychlorinated biphenyls (PCBs), radon, and asbestos; requires testing of chemical substances entering the environment, regulating releases where necessary.

Other Requirements That Affect You

Executive Order

11593… **Protection and Enhancement of the Cultural Environment -** This order requires that Federal agencies administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations. Agencies are to ensure the protection and enhancement of the cultural environment, including sites, structures, and objects of historical, architectural, and archaeological significance.

Executive Order

11988… **Floodplain Management** - The objective of this order is to avoid, to the extent possible, long- and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain development whenever there is a practicable alternative.

Executive Order

11990... **Protection of Wetlands –** This executive order furthers the purposes of the National Environmental Policy Act by directing Federal agencies to "…avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative…"

Executive Order

12088... **Federal Compliance with Pollution Control Standards -** Executive Order 12088 is the critical link between Federal environmental regulations and Federal facilities. This order mandated that Federal facilities control and monitor environmental pollution in compliance with Federal environmental regulations, and established the A-106 reporting process. EPA has issued a document entitled "Federal Facilities Compliance Strategy" (November 1988), also known as the Yellow Book, which establishes a comprehensive and proactive approach by which Federal facilities may comply with these Federal regulations.

Executive Order

12114... **Environmental Effects Abroad of Major Federal Actions –** This order addresses the environmental effects of major Federal actions abroad. The purpose of the Order is to establish internal procedures for Federal agencies to consider the significant effects of their actions on the environment outside the U.S. All interactions between Federal agencies and foreign governments are coordinated by the Department of State. The objectives of the order are to provide information to decisions-makers, to increase awareness of and interest in environmental concerns, and whenever possible, to encourage environmental cooperation with foreign nations.

Executive Order

12196... **Occupational Safety and Health Programs for Federal Employees** – Executive Order 12196 requires Federal agencies to comply with Occupational Safety and Health Administration (OSHA) standards, inspect workplaces, resolve employee complaints,

operate safety and health management information systems, and provide safety and health training.

Executive Order

12856... **Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements** - This order requires Federal agencies to comply with pollution prevention, emergency planning, and reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

Executive Order

12873... **Federal Acquisition, Recycling, and Waste Prevention** – This order requires agencies to incorporate waste prevention and recycling in the agency's daily operations. Also requires the acquisition and use of "environmentally preferable products and services."

Executive Order

12898... **Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations** – Executive Order 12898 directs Federal agencies to identify and address as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations.

Executive Order

12902... **Federal Energy Management** - This order requires a 30 percent improvement in energy efficiency at Federal facilities from FY 85 to FY 2005.

Executive Order

13007… **Indian Sacred Sites** – This order deals with "Indian sacred sites," which are physical places that may ***or*** may not be eligible for the National Register. Agencies are to seek ways to avoid physical damage to such sites, and avoid blocking access to them by Indian religious practitioners.

Executive Order

13031… **Federal Alternative Fueled Vehicle Leadership** – The purpose of this order is to ensure that the Federal Government exercise leadership in the use of alternative fueled vehicles (AFVs). This order requires 75 percent of all general-purpose vehicles acquired (additional or replacement vehicles) by Federal agencies be AFVs. These requirements apply to all agencies, regardless of whether they lease vehicles from the General Services Administration (GSA) or acquire them elsewhere. The goal is to promote the use of domestic and renewable fuels that produce less air pollution.

Executive Order

13084… **Consultation and Coordination with Indian Tribal Governments** – Executive Order 13084 requires an agency to consult and coordinate with Indian tribal governments. Agencies are to be guided by principles of respect for Indian tribal self-government and sovereignty, for tribal treaty and other rights, and for responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments.

Executive Order

13101… **… Greening the Government through Waste Prevention, Recycling, and Federal Acquisition** – This order requires each Executive Agency to develop and implement affirmative procurement programs for all EPA-designated guideline items purchased by their agency.

13123… **Greening the Government through Efficient Energy Management –** This order is designed to promote the leadership role of government in advancing environmental stewardship through directing agencies to pursue all energy efficiency, water conservation, and fuel-switching measures that are life-style cost effective.

Presidential Memorandum and Guidance on Landscaping on Federal Grounds (4/16/94 and and 8/10/95) This guidance promotes sustainable landscape design which minimizes impact on the environment while maximizing cost effectiveness. This guidance does not advocate replacement of existing landscapes, unless it is cost-effective to do so. Goals include the use of regionally native plants; design, use, and promotion of construction techniques that have minimal adverse impacts on habitat; pollution prevention; implementation of water and energy efficient practices; and creation of outdoor demonstration presentations on Federal lands.

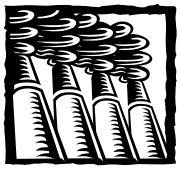
State Regulations... Each state has its own regulatory organization charged with developing and implementing environmental regulations. Many state regulations parallel Federal environmental regulations. In fact, most Federal statutes require promulgation of state standards that are at least as stringent as the Federal requirements. When EPA approves a state's program the state has "primacy" for that particular program. In addition, there are many instances where state agencies have promulgated regulations that are more stringent than the Federal requirements. Because it is not possible in this Guide to summarize all state regulations, it is important that you are aware that state standards can be more stringent than Federal requirements.

It is your responsibility to ensure that your unit stays in compliance with Federal and state, as well as any applicable local or host nation, regulations. Your servicing Civil Engineering Unit (CEU);, Maintenance and Logistics Command (MLC) (v), (s), and (l); Environmental Management Division (G-SEC) (for Headquarters' units);, Naval Engineering Support Units (NESU);, or Naval Engineering Division (G-SEN) has been tasked with the responsibility to guide and assist you in attaining and maintaining compliance.

Coast Guard Requirements... The Coast Guard has developed its own environmental requirements with which you must also comply. Although many of these requirements are based on EPA regulations, some are more stringent than those of EPA. Consult with your servicing CEU, MLC, G-SEC (for Headquarters' units), NESU, or G-SEN for more information.

Air Emissions Compliance

What Is It?



Achieving and maintaining clean air involves limiting new sources of pollution as well as the reducing or eliminating of pollutant emissions from existing sources. It is important that you be aware of the major sources of air emissions at your unit and the nature of the control requirements, both state and Federal. Coast Guard facilities are subject to Federal, state, and local air pollution control requirements.

Current Regulations

The purpose of the Clean Air Act (CAA) is "to protect and enhance the quality of the Nation's air resources so as to promote public health and welfare and the productive capacity of its population…" The CAA requires the Environmental Protection Agency (EPA) to set binding National Ambient Air Quality Standards (NAAQS) which define how clean the air must be. Standards have been set for six "criteria" pollutants: carbon monoxide, lead, ozone, oxides of nitrogen, sulfur dioxide, and particulates. EPA has also developed New Source Performance Standards (NSPS), National Emission Standards for Hazardous Pollutants (NESHAPs have been established for Beryllium, Mercury, Vinyl Chloride, Benzene, Arsenic, Asbestos, Radon, and other radionuclides), and standards for mobile sources.

State regulatory agencies have major roles in the management of air emissions. Elements of the air pollution management programs of state agencies include development of SIPs, permitting of existing stationary sources and construction or modification of new sources, development of regulations for emissions of air toxins, and vehicle inspection and maintenance programs. Many states require Federal fleet vehicles (both owned and leased) to pass state emission testing. State regulations applicable to facility activities can frequently be more detailed and encompassing than Federal regulations.

State Implementation Plans (SIPs) specify emission limits and compliance schedules for pollution sources. SIPs are tailored to the needs of the different air quality control regions that have been established by EPA. A region not meeting air standards is said to be a "non-attainment area," and regulations for the area will generally place stricter requirements on sources of air pollution.

Comprehensive permits are required to construct or operate "major sources" of air pollution. New sources of air pollution cannot degrade the attainment of applicable air quality standards.

 Coast Guard cutters and boats should comply with state and local air emission requirements. Coast Guard cutters operating in the territorial sea of foreign countries must comply with air emission standards defined in the Status of Forces Agreement (SOFA) or international agreement. If no SOFA or international agreement exists, cutters should operate consistent with the substantive air emissions standards observed by the host country's military forces.

The Coast Guard's Program

Objectives…

- Maintain compliance at all times;

Commanding Officer's should…

- Budget sufficient operating resources to maintain and demonstrate compliance, and notify state and local authorities of all instances of noncompliance;
- Implement and maintain proper controls in stationary heating and power plant operations to achieve emission compliance;
- Maintain current records of physical, operations, and emission characteristics of air sources;
- Work with your servicing civil engineering, naval engineering unit, or staff to identify and submit environmental compliance projects required to bring air sources into compliance;
- Sign applications and conduct any industrial hygienic surveys required for permits related to the operation, demolition, preconstruction, and construction phases of new and existing projects;
- Consult with your servicing civil engineering, naval engineering unit, or staff to ensure the development of air episode plans in cooperation with EPA, state, and local air pollution control authorities;
- Ensure through a monitoring program that motor vehicles and other mobile sources comply with applicable emission standards;
- Develop and implement transportation control measures, in consultation with your servicing civil engineering, naval engineering unit, or staff as required by state implementation plans;

- Implement operation and maintenance procedures for cutters to prevent stack emissions in violation of state and local regulations;

- Minimize operation of cutter boilers and diesel engines in port;
- Use hotel services as much as possible; and
- Coordinate activities of tenant commands, including vesselcutters, and host commands to achieve air emissions compliance.

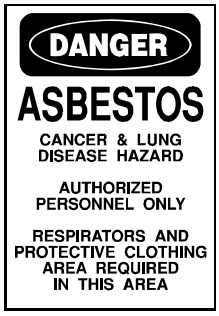
References

COMDINST 4454.1, "Vehicle Inspection and Maintenance (I/M) Program."

The Clean Air Act regulations are in 40 CFR Parts 50 through 93.

Asbestos

What Is It?



Asbestos is the name for a group of natural minerals that separate into strong, very fine fibers that are heat-resistant and extremely durable. Asbestos has been used in a variety of ways including fire protection; thermal, acoustical, and decorative purposes; to insulate boilers, pipes, and many other construction materials and appliances. Buildings most likely to contain asbestos are those built or remodeled between 1945 and 1978. Asbestos containing materials were commonly used in construction during this time period; suspect materials can include pipe lagging, shingles, siding, wall board and other items.

Asbestos is a health hazard when it is an airborne microscopic fiber. Intact, asbestos material in good condition poses little hazard. However, if this material is sanded, cut, torn, or is damaged, hazardous airborne fibers may be generated. "Friable" asbestos containing is any material containing more than one percent asbestos that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Because friable asbestos is likely to generate airborne fibers, it is considered more hazardous than non-friable asbestos material.

These fibers can remain suspended in the air for long periods of time and can easily lodge in body tissues when inhaled. Inhalation of asbestos fibers is known to cause asbestosis, a chronic disease of the lungs which makes breathing progressively more difficult, and mesothelioma, a cancer of the chest and abdominal membranes. Other cancers, primarily of the digestive tract and lungs, have also been associated with exposure to asbestos.

Current Regulations

Several Federal agencies are charged with regulating asbestos-use products, and wastes.

The Occupational Safety and Health Administration (OSHA) sets limits for worker exposure on the job.

The Consumer Product Safety Commission (CPSC) regulates asbestos in consumer products and has banned the use of asbestos in drywall patching compounds, ceramic logs, and clothing.

The Environmental Protection Agency (EPA) regulates the management and disposal of asbestos-containing wastes and has set deadlines for elimination of asbestos in certain products such as water distribution pipes and building products.

Through National Emissions Standard for Hazardous Pollutants (NESHAP), EPA requires pre-work notices and specific work practices to be used during demolition and renovation operations involving asbestos materials. Additionally, the Asbestos Hazard

Emergency Response Act, signed into law on October 22, 1986, requires EPA to study the extent of danger to human health posed by asbestos in public and commercial buildings.

The Coast Guard's Program

Objectives…

- Comply with Clean Air Act and OSHA asbestos work practices;
- Eliminate occupational exposure to airborne asbestos fibers; and
- Eliminate materials containing asbestos used in construction, overhaul, and repair and maintenance of Coast Guard ships and shore facilities.

Commanding Officers should…

- Ensure unit has accurate and up-to-date asbestos management plan;
- Identify suitable asbestos-free substitute materials;
- Ensure that the criteria contained in Safety and Environmental Health standards are understood and complied with by affected personnel;
- Ensure proper identification, evaluation, and management of asbestos in Coast Guard housing and child development centers;
- Ensure that Safety and Environmental Health standards are applied in the acquisition of goods and services, and during the design and construction stages of new or upgraded facilities;
- Ensure that asbestos containing materials are identified and that controls are in place so that renovations and maintenance do not distribute the asbestos;
- Ensure that suspect materials are tested for asbestos prior to demolition; and
- Ensure that all command publications, instructions, manuals, specifications, and technical orders which contain Safety and Environmental Health provisions are reviewed and updated to conform to Safety and Environmental Health standards.

References

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST 6260.1, "Asbestos, Lead and Radon in Coast Guard Housing."

COMDTINST 6260.16A, "Asbestos Exposure Control Manual."

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M5100.47, "Safety and Environment Health Manual."

The Federal asbestos regulations are contained in Title 40 CFR Part 61 and Part 763. The OSHA standard, which limits occupational exposure to asbestos, is contained in Title 29 CFR Parts 1910 and 1926.

Several guidance documents are available from EPA to aid individuals responsible for asbestos management or abatement. These documents include:

Guidance for Controlling Asbestos-Containing Materials in Buildings. EPA 560/5-85-024, June 1985.

Asbestos in Buildings: Simplified Sampling Scheme for Surfacing Materials. EPA 560/5-85-030A, October 1985. (Pink Book)

Asbestos in Buildings Guidance for Service and Maintenance Personnel. EPA 560/5/-85-018, July 1985. (Custodial Pamphlet)

Managing Asbestos in Place: A Buildings Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials, July 1990.

Coastal Zone Management

What Is It?

It is the policy of the U.S. to preserve, protect, develop, and, where possible, to restore or enhance, the resources of the nation's coastal zone. The coastal zone includes coastal waters and adjacent shore lands, the limits of which are determined by each state. Federally held lands are excluded from the coastal zone, but activities on Federal lands with effects that spill over into the coastal zone require consistency with state coastal zone management requirements.

Current Regulations

The Coastal Zone Management Act of 1972 provides for the protection of the nation's coastal areas by authorizing states to develop and implement management programs that preserve, protect, and enhance the resources of the waters of the coast and the adjacent lands. Congress gave the states power to ensure that Federal activities within or outside the coastal zone that effect land or water use, or natural resources of the coastal zone are conducted in a manner that is consistent, to the maximum extent practicable, with the enforceable policies of a Federally-approved state state coastal zone management plan. This includes direct agency actions, development projects within the coastal zone, and the granting of any Federal license or permits to conduct an activity affecting land or water use in the coastal zone.

For a direct Federal activity, the Federal agency is required to determine whether its action affects the coastal zone of a state with an approved management plan. All Federal development projects are presumed by regulation to affect the zone. If an action affects the coastal zone, the agency must determine whether the action is consistent with the state's program, and submit a consistency determination to the state for concurrence. The state has 45 days to concur or object to a USCG activity, after which time concurrence is assumed. The Federal action may not occur sooner than 90 days from the issuance of the consistency determination to the state. For those actions of others where the USCG may need to grant a permit, the state has 6 months to respond to the Coast Guard's permitting action.

The Coast Guard's Program

Objectives....

- Ensure consistency with appropriate state coastal zone management plans to the maximum extent practicable.

Commanding Officers should...

- Coordinate the planning of programs and projects with your servicing legal office and environmental staff to schedule sufficient time and resources to achieve consistency with the state coastal zone management plan;

- Coordinate preparation of local directives and guidance with your servicing environmental staff to ensure that they include appropriate procedures and references to achieve consistency with the state coastal zone management plan;

- Coordinate development of decisions and approvals with your servicing environmental staff to ensure consistency with the state coastal zone management plan;

- Coordinate review of coastal zone determinations with your servicing environmental staff;

- Request the necessary resources to implement programs and execute projects in conformance with commitments to achieve consistency with state coastal zone management plans; and

- Cooperate with MLC staff to provide coastal zone consistency data in a timely manner to respond to requests from Headquarters.

References

16 USC 1451-1464, "Coastal Zone Management Act."

15 CFR Part 930, Implementing Regulations.

Drinking Water

What Is it?

Drinking water is obtained from two general sources. Approximately half of the U.S. drinking water is derived from rivers, streams, and other forms of "surface" water. The remainder, "groundwater", comes from reserves of underground water known as "aquifers."

The quality of water supplies is a function of geography as well as the effects of human activity. Natural contaminants include suspended matter, sulfates, chlorides, nitrates, fluoride, and radionuclides. The most common natural contaminants are harmful bacteria and viruses. Fortunately, modern technology can limit or remove these natural contaminants from drinking water.

In addition to natural pollutants, there are over 60,000 possible man-made drinking water contaminants. These contaminants, ranging from solvents to pesticides, are used by both industry and agriculture. When used or discarded improperly, they can pollute ground and surface waters, in turn contaminating drinking water.

Drinking water is usually piped from treatment plants to consumers via water distribution systems, where it can potentially be contaminated by corrosion by-products from rusting pipes and by lead from lead-soldered pipes. It is important that water distribution systems not contribute contamination to purified drinking water.

Current Regulations

The Safe Drinking Water Act (SDWA) of 1974 requires the Environmental Protection Agency (EPA) to establish primary drinking water regulations for any pollutants that may have an adverse effect on human health. EPA has developed primary drinking water maximum contaminant levels (MCLs) and secondary MCLs. The secondary regulations are not federally enforceable, but are intended as guidelines for state regulatory agencies. However, some states consider the secondary MCLs enforceable requirements in the same way that primary MCLs are enforced. It should be noted that individual states are responsible for enforcing drinking water regulations.

Managers of public water supply systems are required to regularly analyze treated water to ensure that the MCLs are met. Water suppliers must also notify their customers whenever water quality does not meet the recommended limits. A public water system is any unit providing piped water which has at least 15 service connections or regularly serves an average of at least 25 individuals daily for at least 60 days per year.

The Coast Guard's Program

Commanding Officers should…

- Inspect unit-maintained sources to ensure adequate maintenance of facilities and protection against possible contamination;
- Inspect procedures used for all facilities and operations involved in loading, unloading, distilling, or treating any potable water supply;
- Inspect all unit-maintained storage and distribution facilities, including plumbing, for sanitary defects that might cause failure of service or contamination of water;
- Maintain required disinfection and bacteriological sampling for all potable water supply sources (as noted below);
- Maintain a pH value in a range of 6.8 to 7.8 and a measurable disinfectant residual of at least 0.2 ppm (parts per million) through out all parts of the distribution system for shore commands that obtain their potable water from an approved municipal supply but treat or distribute the water from an "on base" storage facility;

- Ensure ships have a safe potable water system by maintaining a measurable residual of at least 0.2 ppm free available chlorine with a pH value in a range of 6.8 to 7.8 in all parts of the distribution system;
- Treat water received from non-approved sources to achieve a 2.0 ppm free available chlorine residual after a 30 minute contact time;

- Collect 4 samples from the ship's potable water system at least monthly for bacteriological testing. This is a minimum requirement and more frequent tests should be made if practical. The membrane (e.g., milipore) filter technique should be employed when it is not practical to send samples ashore to a certified laboratory; and
- Conduct water usage audits in conjunction with energy audits to identify ways in which water use can be minimized. Work through the CEUs to ensure water conservation projects are implemented.

References

COMDTINST M11300.2, "Water Supply and Waste Water Disposal Manual."

COMDTINST M11000.11A, "Civil Engineering Manual," Chapter 10.

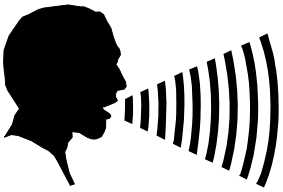
COMDTINST M5100.47, "Safety and Environmental Health Manual."

The National Primary and Secondary Drinking Water Regulations can be found in Title 40 Parts 141 and 143, respectively. Implementing regulations for the SDWA are included in Title 40 CFR Parts 142 through 149.

EPA has produced a helpful pamphlet available at EPA Public Affairs Offices entitled: "You and Your Drinking Water." December 1986.

Emergency Planning and Community Right-To-Know

What Is It?



In response to growing concern regarding the effects of toxic and hazardous substances on humans and the environment, it has become necessary to develop a mechanism to inform potentially affected populations of the types and quantities of hazardous materials that are present in living and work places. This mechanism will allow each individual to judge the potential personal risk resulting from living or working in a specific area and will allow for effective emergency procedures in the event of a spill or other uncontrolled release of hazardous material.

Current Regulations

In November 1986, Congress passed the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as SARA Title III. The two main purposes of SARA Title III are to encourage and support emergency planning for responding to chemical accidents and to provide local governments and the public with information about possible chemical hazards in their communities. Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, directed Federal agencies to also comply with these emergency planning requirements

Local communities and states have the basic responsibility for understanding, managing, and reducing risks posed by chemicals at the local level, and for dealing with emergencies within their communities.

Industry is responsible for gathering information on the chemicals it uses, stores, and releases into the environment; for providing the information to government agencies and local communities; and for helping set up procedures to handle chemical emergencies.

The Environmental Protection Agency (EPA) is responsible for ensuring that industry complies with the law's requirements, that the public has access to information on annual toxic chemical releases, and that the information is used in various EPA programs to protect the nation's air, water, and soil.

SARA Title III requires civilian communities to:

- Prepare for emergency releases of hazardous substances by appointing a Local Emergency Planning Committee (LEPC), and State Emergency Response Commission (SERC);

- Notify immediately the LEPC/SERC when any release occurs of hazardous substances in quantities greater than established levels;

- Prepare a hazardous substances inventory to be submitted to the LEPC/SERC and local fire department; and

- Prepare an annual report detailing the amount of hazardous materials released (through accident or through normal operations) and amount transported as waste to another locations.

The Coast Guard's Program

Objectives…

- Comply with applicable substantive requirements; and

- Provide a representative to participate in the LEPC, if required.

Commanding Officers should…

- Ensure that a Hazardous Material Management System (HMMS) is implemented to track and inventory the procurement and use of hazardous materials;

- Submit Tier II reports to LEPC, SERC, etc. by July 1 of each year;

- Notify the LEPC of any relevant changes at the facility;

- Provide information requested by the LEPC necessary to develop or implement the community emergency plan; and

- Establish and implement procedures to ensure the unit complies with COMDTINST 16455.10 requirements.

References

COMDTINST M16455.10, "Emergency Planning and Community Right-to-Know Act and Pollution Prevention."

Detailed information on the various provisions of the Emergency Planning and Community Right-to-Know Act are located in Title 40 CFR Parts 300, 350, 355, 370 and 372.

Executive Order 12856, "Federal Compliance with Right-to-Know and Pollution Prevention (P2) Laws."

Endangered and Threatened Species

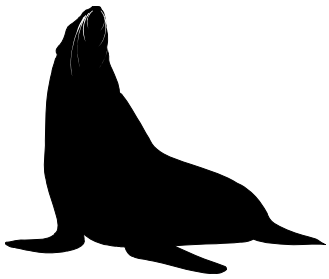
What Are They?

Endangered species are defined as those species that are in danger of extinction throughout all or a significant portion of their range. Threatened species are those that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

Current Regulations

Threatened and endangered species are protected under the Endangered Species Act (ESA). The ESA has been amended several times, most recently in 1988. Under the Act, the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) are responsible for compiling the lists of threatened and endangered species. Listings are based solely on the best scientific and commercial data available.

Section 7 (a)(1) of the ESA requires Federal agencies to use their operating authorities to carry out conservation programs for **listed** species. Section 7 (a)(2) also requires Federal agencies to ensure that all Federally associated activities within the U.S. do not have adverse impacts on the continued existence of threatened or endangered species or on habitats that are important in conserving those species.



Section 7 (a)(4) of the ESA requires Federal agencies to confer with the USFWS or NMFS on any agency action which is likely to jeopardize the continued existence of any species **proposed to be listed** or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. There are no limitations on the commitment of resources when the action may affect species proposed for listing.

Agencies must consult with the USFWS or the NMFS, which maintain current lists of species that have been designated as threatened or endangered, to determine the potential impacts a project may have on protected species. The USFWS has established a system of informal and formal consultation procedures. Informal consultation with the USFWS or NMFS is undertaken when Coast Guard representatives with responsibility for USCG actions are uncertain whether there is the potential for threatened or endangered species or critical habitat in the vicinity of a proposed action. If a Coast Guard action may affect a listed species or critical habitat then a Biological Assessment is required. Formal consultation is initiated once the Biological Assessment for a project is complete. Within 45 days of completing formal consultation, the USFWS or NMFS must deliver a Biological Opinion that states whether the action is likely to jeopardize the continued existence of a listed species or cause the destruction or adverse modification of critical habitat. The USFWS preparation of a "Biological Opinion" will conclude formal consultation. The result of informal or formal consultations with the USFWS under Section 7 of the Endangered Species Act Amendments of 1978 should be described and

documented in any applicable Environmental Assessment (EA) or Environmental Impact Statement (EIS) under NEPA.

Section 9 of the Act prohibits any person subject to U.S. jurisdiction to possess, sell, deliver, carry, transport, or ship any species listed under this Act, except by authorized permit. Remember to also check for state-listed species when initiating a project.

The Coast Guard's Program

Commanding Officers should…

- Every 3 years or when undertaking a new action in an area where there may be protected species or habitat, obtain lists of state and Federally listed or candidate endangered or threatened species or critical habitat potentially present on the facility from the servicing MLC unit, USFWS, or National Marine Fisheries Service;

- Manage activities to avoid impacting endangered, threatened, or candidate species or their habitat; and

- Coordinate planning activities with Federal and state agencies to ensure future activities do not affect endangered, threatened, or candidate species or their habitat.;

References

COMDTINST M5090.3, "Natural Resources Management."

Regulations implementing the Endangered Species Act are found in Title 50 CFR Part 222.

Lists of Endangered and Threatened Wildlife and Plants are found in Title 50 CFR parts 17.11 and 17.12, respectively; the designated Critical Habitats are listed in Title 50 CFR Parts 17.95 and 17.96.

Energy Efficiency

What Is It?

Everything the Coast Guard does requires some form of energy, either oil or oil derivatives, natural gas, or electricity to heat and cool our buildings, fly our aircraft, drive our vehicles, sail our ships, and do all the other things we do to perform the missions of the Coast Guard. We are committed to improving the energy efficiency of all of our assets, whether on land, air, or sea, while maintaining or improving the performance of energy-consuming systems.

Current Regulations

Executive Order 13123 requires a 35 percent improvement in the energy efficiency of federal buildings by FY 2010, using FY 1985 as the baseline. Performance towards this goal is measured in BTU's per square foot of building space. The EO also strongly encourages the use of alternative, non-petroleum-based fuels wherever economically feasible, and the use of alternative financing methods, such as Energy Savings Performance Contracts, to meet the goal.

The Coast Guard's Program

Objectives...

- Perform comprehensive energy audits at all Coast Guard facilities to identify every point of energy usage and cost effective ways to improve efficiency without sacrificing performance.

- Implement all cost effective energy conservation projects identified in the energy audits to meet the goals set forth by law and executive order.

The Coast Guard is a partner in the Environmental Protection Agency's Energy Star Buildings Program, which is administered under EPA's Office of Atmospheric Pollution Prevention. We are committed to improving the energy efficiency of our building stock through a systematic program of energy audits and surveys, project identification and implementation. The Energy Star Buildings Program emphasizes a 5-stage approach to energy efficiency, as shown in the following table. The general idea is to ensure building energy loads are minimized to every practical extent prior to implementing major heating, ventilation, and air conditioning (HVAC) changes.

	Survey Item	Resource
Stage 1	Lighting Systems	Green Lights Program *Lighting Upgrade Manual*
Stage 2	Building Tune-Up: • Energy consumption • Temperature and humidity controls • Exterior systems (windows, doors, etc.) • Mechanical equipment (air side and water side) • Operating schedules (lights, office equipment, and HVAC equipment)	Energy Star Buildings Manual
Stage 3	Load Reductions • Building exterior systems: windows and roofing	Energy Star Buildings Manual
Stage 4	HVAC Distribution Systems • Variable air volume systems	Energy Star Buildings Manual
Stage 5	HVAC Plant • Chillers	Energy Star Buildings Manual

The Coast Guard has agreed to the following schedule of surveys and completion of cost-

effective energy upgrades to ensure compliance with the terms of its agreement with

	Percent of Eligible Space Where Upgrades Have Begun or Surveys Completed	Percent of Eligible Space Where Upgrades are Completed
March 1997	10%	
March 1998	20%	Complete Pilot upgrades
March 1999	30%	10%
March 2000	40%	20%
March 2001	50%	30%
March 2002		40%
March 2003		50%

Commanding Officers should...

- Work with the CEU's to ensure their sites units are audited, and to determine the best way to fund and implement all cost effective projects;

- Implement maintenance procedures to keep the engineering plant at optimal efficiency;

- Make sure all Coast Guard employees understand the need to conserve energy and observe the proper procedures to minimize energy waste; and

- Provide rewards and recognition to personnel who demonstrate ways to improve energy efficiency.

References

COMDTINST 4100.2D, Energy Management

Energy Star Buildings Manual, U.S. Environmental Protection Agency.

Environmental Compliance Evaluation (ECE)

What Is It?

The Coast Guard's Environmental Compliance Evaluation (ECE) provides a means to internally monitor, achieve, and maintain compliance with environmental, natural resources, and cultural and historic preservation requirements. An ECE is typically performed by a team of Coast Guard staff (may or may not include contractor support) who will come to review all unit processes and activities that may have environmental effects.

The Coast Guard conducts at all Coast Guard shore facilities and independently moored vessels in the U.S. and its trust territories at least every three years. Coast Guard shore facilities must receive ECEs at a minimum of every three years. MLCs, CEUs, or G-SEC may perform ECEs on a more frequent basis for certain units, depending on environmental liabilities at the unit (e.g., Industrial Activities have higher compliance risk, and thus may need more frequent inspections).

It is helpful if the unit can provide a staff member to accompany the ECE team. The staff member can provide the team with information on unit activities, and the team can educate and train unit staff on environmental compliance matters.

The Coast Guard's Program

Objectives…

The ECE program will provide Commanding Officers with:

- Compliance status of unit;
- Identification of work required at the unit level, such as record keeping or testing;
- Specific recommendations for corrective action;
- Assistance in developing, estimating, and programming projects for Operating Expense (OE) or Environmental Compliance and Restoration (EC&R) funding; and
- Advice on environmental training, staffing, and program management.

Commanding Officers should…

- Make personnel, records, and facilities available during ECEs;
- Ensure prompt correction of deficiencies within the control of the unit;
- Consult with your servicing Civil Engineering Unit (CEU), Maintenance and Logistics Command (MLC), or G-SEC (for Headquarters' units) to ensure that funding for environmental projects is programmed and prioritized appropriately;
- Read the most recent ECE report upon taking command to familiarize you with regulatory requirements that apply to the unit; find out the status of corrective actions; and
- Make sure responsible HQ office, MLC, or CEU has performed an ECE at your unit in the past three years, and find out when the next one is scheduled. Ask for help to prepare for the audit.

Environmental Emergencies

What Are They?

For the purpose of this Guide, an emergency is essentially an uncontrolled discharge of a regulated substance to the environment. Emergencies generally fall into the following categories:

- Releases or spills of oil or hazardous substances;
- Fires;
- Explosions.

These classifications can be further divided into minor incidents that do not require implementation of formal emergency response plans, and major incidents, which require full implementation of emergency response procedures.

The prevention of chemical incidents must be a key component of your unit's operation. By preventing chemical releases, oil spills, fires, and explosions, you will be saving lives, jobs, property, and resources. Emergency prevention is not only required by law; it is good business!

Current Regulations

CFR 49 Chapter 172.604 requires that all Hazardous Materials in storage or transit must display a 24-hour emergency response telephone number. Currently the Coast Guard has a contract in place to respond to any leak, fire, or medical emergency 24-hours a day, seven days a week. For FY99, the response telephone number is (800) 535-5053.

Many of the other regulations and laws referenced in this Guide have specific requirements for emergency response. These regulations and laws apply to any shore facility or cutter that has on-site material that presents a potential hazard for fire, explosion, or spill. The regulations require your facility to have adequate resources available to respond to emergency incidents and that the facility maintain written emergency response plans to ensure that appropriate action is taken if an emergency occurs. Regulatory programs under the Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), Clean Air Act (CAA), and Occupational Safety and Health Act (OSHA), for example, include requirements for emergency response planning.

Preparation and updating of these emergency response plans is generally the responsibility of either the engineer or safety officer at your unit. As Commanding Officer, you should be aware of your responsibilities in these plans.

CERCLA and CWA require that oil and hazardous substance pollution incidents in U.S. waters in reportable quantities must be immediately reported directly to the National Response Center (NRC). If the NRC can not be reached by phone immediately, then the spiller/spill discoverer is required to immediately notify the closest EPA office.

The Emergency Planning and Community Right to Know Act (EPCRA) requires that reportable quantity hazardous substance releases be reported to State Emergency Response Commissions (SERC) and Local Emergency Planning Committees (LEPC). Reportable quantity oil and hazardous substance spills occurring within state waters, or with the potential to impact navigable waters, must be reported to applicable state environmental authorities by voice where required by state statute.

Under international agreements, oil and hazardous substance spills that impact, or have the potential to impact, a foreign shoreline must immediately be reported to the nearest affected nation. Spills that impact or have the potential to impact shorelines of Canada or Mexico fall within the scope of U.S./Canada and U.S./Mexico bilateral agreements and must be reported immediately to the NRC. Additionally, oil and hazardous substance spills in Puerto Rico, the Panama Canal Zone, and the U.S. Virgin Islands must be reported to the NRC.

The Coast Guard's Program

Commanding Officers should…

- Be aware of reporting requirements (see "Reportable Releases" and "Reporting and Record Keeping");
- In port, cutter commanding officers shall notify the shore facility commanding officer by the most expeditious means, notify the National Response Center by telephone, and take immediate actions, to the extent possible, to mitigate the effects of the spill;
- Actively involve your public affairs support organization to ensure that adequate and accurate information is provided to the general public, news organizations, and elected officials. Public awareness plans should be developed proactively to avoid inappropriate reaction in emergency situations. (see "Emergency Planning and Community Right-to-Know" and "Public Relations");
- In addition to any statutory or regulatory requirement, the Coast Guard requires Commanding Officers to report environmental emergencies using an administrative investigation under COMDTINST M5830.1;
- Prevent emergencies from occurring in the first place (see Oil and Hazardous Substances Contingency Plans) by training, unit awareness preparation, etc; and
- Be familiar with your unit response plans. Ensure that they are up-to-date and accurate.

Environmental Justice

What Is It?

Environmental Justice is the concept that all citizens deserve protection from disproportionate exposure to environmental hazards. Minorities and low-income neighborhoods often coexist with industrial sites that bring in poor air quality, soil and water contamination, and other undesirable environmental impacts. These impacts have had the potential to adversely affect people's health and quality of life. Environmental justice requires project planners to consider the impact a proposed project will have on low-income populations and minority groups and to work toward minimizing negative impacts where feasible.

Current Regulations

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, directs Federal agencies to identify and address as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. Executive Order 12898 restates the provisions found in the Civil Rights Act of 1964, Title VI which prohibits discriminatory practices in programs receiving Federal funds.

The Coast Guard's Program

Within the Coast Guard, the Director of Civil Rights, COMDT (G-H), has the responsibility for developing policy and procedures to comply with the Executive Order.

Commanding Officers should…

- Ensure that the potential for proposed projects or actions to affect minorities or low-income populations is considered early in planning processes; and
- Implement measures to avoid or minimize impacts to these populations where feasible.

References

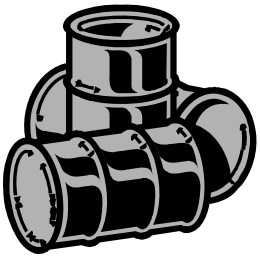
U.S. Coast Guard Environmental Justice Strategy

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

CEQ's Environmental Justice Guidance under the National Environmental Policy Act

Environmental Restoration

What Is It?



Environmental restoration refers to a comprehensive effort to identify and remediate past hazardous waste sites at Coast Guard shore facilities and aids to navigation sites. Environmental restoration should be performed as required by Federal or state regulations including the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA), and the Clean Water Act (CWA), as appropriate.

Authority to enter into and sign Federal Facility Compliance Agreement (FFCA), administrative Consent Orders, Consent Decrees, and their equivalent has been delegated to the Chief of Staff (G-CCS).

The Coast Guard has an inherent environmental risk due to contamination of the groundwater, surface water, soil or air on its properties. The contamination may have been created by numerous sources including:

- Operations or processes currently being carried out by the Coast Guard;
- Operations or processes carried out by previous property owners such as a military organizations or industrial concerns; and
- Contamination emanating from the property of adjacent landowners.

All of these situations may have risks to the Coast Guard, its employees, and the environment.

The Coast Guard's Program

The Chief, Environmental Management Division (G-SEC-3) manages the restoration program with the assistance and support of the Chief, Office of Naval Engineering (G-SEN) for cutter clean-up issues; and the Chief, Office of Environmental Law (G-LEL) for environmental legal issues. These divisions are also responsible for directly supporting all Headquarters units with their clean-up requirements. The Maintenance and Logistics Command (MLCs) and subordinate units provide site restoration support to all Area units.

The order in which the Coast Guard conducts restoration and cleanup activities is based on a "worst-first" scenario that assigns the highest and most immediate priority to those facilities representing the greatest hazard to the environment and public health and welfare. Some of the criteria used to assign priority are:

1. Imminent and substantial danger to public health or welfare;

2. Anticipated danger in the near-term from potential accident, deterioration or failure of safeguards while attempting cleanup or restoration;
3. An ongoing condition with unknown, but potentially serious health consequences unless action is taken; and
4. Legally-binding agreements with Federal, state, and local regulatory agencies.

Commanding Officers should…

- If contamination is suspected at your facility, you should immediately contact your servicing civil engineering support organization and your supporting legal organization. Further remediation of site conditions can be dealt with under the Coast Guard's Environmental Compliance and Restoration (EC&R) Program;.
- Notify the National Response Center (NRC), as well as appropriate state and local authorities, as soon as you have knowledge of a hazardous substance release in excess of a reportable quantity (listed in 40 CFR Part 302.4) at your unit (this may include old releases that are just discovered);
- Implement a public participation program including a Community Relations Plan, and keep CEUs, ISCs, MLCs, NESU, G-SEN, or Headquarters informed of all public affairs actions involving significant site restoration;
- Notify the chain of command and your servicing legal staff when your unit is notified that it sent waste to a site requiring cleanup and is a Potentially Responsible Party (PRP); and
- Review the technical execution of the site restoration program and provide feedback to the CEUs, MLCs, or Headquarters on any major disagreement as soon as possible.

Floodplains

What Are They?

Floodplains are normally dry lands adjacent to a body of water, such as a river, stream, lake, or ocean, that are susceptible to inundation by floodwaters. The floodway is the central portion of the floodplain that carries the greatest portion of the waterflow in a flood. Obstructions, such as buildings or levies, in the floodway will result in increased flood levels upstream. 100-year floodplains and flood hazard areas are mapped by the Federal Emergency Management Agency. A 100-year floodplain is an area with a 1 percent chance of being flooded in any given year.

Current Regulations

Federal activities that may affect floodplains are regulated by Executive Order 11988, which requires agencies to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains in carrying out agency responsibilities. Floodplain ordinances, zoning regulations, and building codes vary from locality to locality, but they generally discourage new construction or other disturbances in floodplains.

The Coast Guard's Program

It is the Coast Guard's policy to protect, conserve, and manage natural resources including floodplains as vital elements of an optimum natural resource program and to utilize and care for natural resources in the combination best serving the present and future needs of the U.S. and its people.

Commanding Officers should…

- Determine if part of their facility is in or adjacent to a floodplain;
- Determine if there are obstructions in the floodplain or other activities that may disturb the floodplain; and
- Determine if there is a risk to human safety or your mission resulting from potential flooding in the area.

References

COMDTINST M5090.3, "Natural Resources Management."

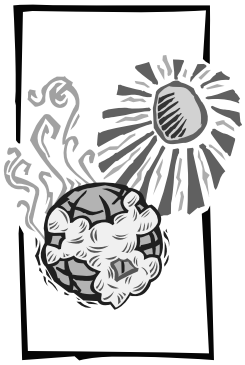
Executive Order 11988, "Floodplain Management."

DOT Order 5650.2.2, Floodplain Management and Protection (44 FR 24678).

43 CFR 6030

Greenhouse Gasses and Global Warming

What Are Greenhouse Gases and Global Warming?



Greenhouse gases are gases that absorb earth's surface radiation and heat from the sun, thus preventing this heat from escaping from the atmosphere. The most abundant greenhouse gas is water vapor, followed by carbon dioxide. The burning of fossil fuels and wood produces carbon dioxide. Methane, nitrous oxide, and halocarbons [which include choloroflourocarbons (CFCs)] also act as greenhouse gases. Methane is produced by landfills, fossil fuel production, rice farming and cattle. Fertilizers and sewage treatment plants produce nitrous oxide. Halocarbons are produced for refrigerants and other industrial products. Carbon dioxide, methane, and nitrous oxide all occur naturally in the environment; however halocarbons are entirely manmade. The production of CFCs has been banned in the United States; however other halocarbons are being used in their place and are highly effective at trapping heat in the atmosphere.

Greenhouse gases are needed to moderate the earth's temperature; however, scientific evidence indicates that an abundance of these gases may raise global temperatures. Data collected around the planet show that the earth's temperature has gotten progressively warmer over the last century and is warming at a rate greater than any time since the ice age. The sea level has risen approximately 4 to 10 inches during the last century due to melting glaciers and thermal expansion.

There are uncertainties in determining the total effect greenhouse gases and global warming will have on the environment. Clouds, vegetation, and ice cover could all act to moderate temperatures and reduce or alter the effects of greenhouse gases and global warming.

Current Regulations

The Energy Policy Act of 1992 requires a 20 percent improvement in energy efficiency at Federal facilities from Fiscal Year (FY) 1985 to FY 2000 and requires that the use of fossil fuels be minimized. Executive Order 12902 and 13123 requires a 30 percent improvement in energy efficiency at Federal facilities from FY 85 to FY 20005. Executive Orders 12856 and 12873 mandate that Federal agencies take steps to reduce waste and pollution by reducing the generation of wastes and through recycling. This order also requires that agencies acquire and use environmentally preferable products and services.

The Coast Guard's Program

Commanding Officers should…

- Coordinate with your Pollution Prevention Coordinator to identify ways to reduce waste generated by your unit;
- Establish an Affirmative Procurement Program for environmentally preferable products and recyclable materials and encourage recycling within your unit;
- Coordinate with your servicing MLC to determine ways to reduce your unit's energy consumption.

References

COMDTINST 4100.2D, Energy Management

COMDTINST M16455.10, "Emergency Planning and Community Right-To-Know Act and Pollution Prevention."

COMDTINST 16477.5, Coast Guard Qualified Recycling Program.

COMDTINST M4500.5, "Property Management Manual."

COMDTINST M4200.19C, "Coast Guard Acquisition Procedures."

COMDTINST M4200.23, "Procurement Information Manual."

Executive Order 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements."

Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention."

Executive Order 12902, "Energy Efficiency and Water Conservation at Federal Facilities."

Energy Star Buildings Manual, U.S. Environmental Protection Agency

Office of the Federal Environmental Executive, "Greening the Government: A guide to implementing Executive Order 12873."

Hazardous Waste

What Are They?

The terms "hazardous waste," and "hazardous substance," have very specific legal and scientific definitions in Federal regulations. The lay person may collectively identify these chemicals as toxic, highly flammable, corrosive, or reactive chemicals.

Current Regulations

Hazardous wastes (HW) are defined and regulated by the Resources Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA considers a waste hazardous if it meets certain levels of reactivity, ignitability, corrosivity, or toxicity, or is otherwise listed as a hazardous waste in Title 40 CFR Part 261. Currently, there are about 450 listed wastes. In general, RCRA regulations address the day-to-day management of these wastes. RCRA regulations include very detailed and specific requirements for facilities which generate, transport, treat, store, or dispose of hazardous wastes.

Conditionally Exempt Small Quantity Generators (CESQG) are those facilities that generate less than 100 kilograms (220 pounds) of hazardous materials per month, less than 1 kilogram (2.2 pounds) of acutely hazardous chemicals (i.e. mercury, lab chemicals) per month, and less than 50 kilograms (110 pounds) of perchloroethylene per month. CESQGs have limited regulatory requirements under RCRA.

Small quantity generators (SQG) are facilities producing more than 100 kilograms (220 pounds) but less than 1,000 kilograms of hazardous waste per month. Wastes considered acutely hazardous are regulated at 1 kilogram (2.2 pounds) per month.

Large quantity generators (LQG), which produce the majority of RCRA-regulated hazardous waste, are facilities that produce 1,000 kilograms (2,200 pounds) or more of hazardous waste per month.

Treatment, storage, or disposal facilities (TSDF) are required to apply for operating (part B) permits. Federal permits for generators and transporters of hazardous waste (e.g. facilities that do not store hazardous waste for long periods of time) are not required. However individual states may require permits. In addition, the Federal Facility Compliance Act (FFCA) allows states to assess fines against Federal facilities for RCRA violations.

All generators, unless they are conditionally exempt small quantity generators (CESQG) must treat, store, or dispose of their wastes at RCRA-permitted facilities. **Note: facilities are always the "generators" ofr hazardous waste produced on their property regardless if produced by contractor or unit activities**.

Cutters are required to transfer hazardous waste generated on board to a shore facility for processing in compliance with RCRA requirements as the generator of hazardous waste. A summary of generator requirements is given in the following table (on page 52).

The HSWA includes provisions for regulation of underground storage tanks (USTs) which contain petroleum products or hazardous substances. These regulations include specific requirements for determining if tanks are leaking, measures to prevent leaks, and procedures by which contamination caused by leaking tanks must be cleaned up.

Hazardous substances (HS) are defined by the Clean Water Act (CWA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) as chemicals which are harmful to public health and welfare or may affect natural resources and are regulated if spilled or otherwise released to the environment. The Environmental Protection Agency (EPA) has designated "reportable quantities" for each hazardous substance listed under CERCLA. If an amount equal to or greater than the reportable quantity of a hazardous substance is released to the environment, you are required to clean up the spill and immediately report the release to the appropriate regulatory agency (see Reportable Releases, page 97). . Spills of oil and other petroleum products are also regulated under CWA when spilled in areas where they will, or eventually could, enter waterways.

Universal Waste is a specific term EPA uses to identify certain widely generated hazardous wastes. While universal wastes are hazardous, EPA has determined that these wastes should be managed under a streamlined waste management system in order to encourage recycling and appropriate treatment rather than the past practice of sending them to municipal landfills. EPA's universal waste regulations are located in 40 CFR 273. The list of universal wastes may grow; however, EPA has initially classified the following as universal wastes:

- Batteries (nickel cadmium batteries, in particular)
- Pesticides recalled by EPA
- Thermostats containing mercury.

SUMMARY OF GENERATOR REQUIREMENTS

REQUIREMENT*	Conditionally Exempt Small Quantity Generator: 100 KG or less per month	Small Quantity Generator: more than 100 KG and less than 1,000 KG per month	Large Quantity Generator: 1,000 KG or more per month
EPA Generator ID#	No	Yes	Yes
Manifest Wastes	No	Yes	Yes
Time Limit for Disposal (days)	None	180	90
Accumulate On-site Without Permit (kgs)	1,000	6,000	Unlimited
Satellite Accumulation	N/A	Yes	Yes
Record keeping and Reporting	No	Yes	Yes
Preparedness and Prevention Plan	No	Yes	Yes
Contingency Plan	No	Yes	Yes
Personnel Training	No**	Yes	Yes
Disposal in Regulated Facility	Yes***	Yes	Yes
Waste Minimization Program	No	No	Yes
Exception Reports	No	Yes	Yes

* These are Federal requirements; state requirements may be more stringent.
** Not legally required, but recommended for hazardous waste managers.
*** A CESQG need only be reasonably sure that hazardous waste eventually gets to an authorized disposal facility, but it can be transferred to a responsible party.

The Coast Guard's Program

Objectives…

- Reduce hazardous waste generated for disposal by implementing minimization technologies, such as eliminating or modifying current processes that use hazardous materials or generate hazardous wastes;

- Obtain and/or review required operating permits for hazardous waste facilities at applicable units and complete construction of all required hazardous waste storage and handling facilities;

- Implement a regulatory compliance system to control and safeguard the labeling, collection, pickup, transportation, and ultimate disposal of hazardous waste;

- Eliminate or greatly reduce the use of lead-based paints in the Coast Guard; and

- Eliminate Polychlorinated Biphenyls (PCBs) from use in the Coast Guard (per TSCA); and.

- Attempt to maintain or bring facility into CESQG status to minimize regulatory burden on unit (see table, page 52).

Commanding Officers

Commanding Officers should…

- Appoint an individual responsible for hazardous waste management and hazardous waste minimization (HAZMIN) if the unit generates hazardous waste;

- Establish procedures to determine the types and quantities of hazardous wastes generated;

- Develop a unit hazardous waste management/HAZMIN plan;

- Sign and submit reports and other required data to EPA, state, or local agencies;

- Budget and fund the operation and maintenance of facilities and equipment necessary to handle, store, transport, and dispose of hazardous waste in accordance with applicable Federal, state, and local requirements;

- Ensure the training of personnel involved in hazardous waste operations is in accordance with Federal and state requirements;

- CESQGs utilize local community household hazardous waste collection programs whenever available to simplify procedures and minimize cost;

- Prepare, and renew annually, a host/tenant agreement establishing responsibilities with regard to proper management and handling of hazardous waste (the host shore facility will be the generator for all tenants including cutters); and

- Cutters while underway - collect hazardous waste and offload at port for transfer to port facility.

References

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M16455.10, "Emergency Planning and Community Right-To-Know Act and Pollution Prevention."

COMDTINST 16477.5 "Coast Guard Qualified Recycling Program (QRP) Policy."

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST M16478.2, "The Procurement, Handling and Disposal of Polychlorinated Biphenyls (PCBs)."

COMDTINST 16478.10, "ATON Battery Release Reporting Requirements."

COMDTPUBT P16480, "Emergency Planning, Preparedness, and Prevention Guide for Oil Spills and Hazardous Substances Releases."

ALDIST 112/95, “Universal Waste Rule.”

OPNAVINST 5080.1

Hazardous waste regulations under RCRA are found in Title 40 CFR Parts 260 through 299. Hazardous substance regulations under CERCLA are located in Title 40 CFR Parts 300 through 399.

Training requirements, which are vital to a proper hazardous waste/hazardous materials program, are outlined in Title 29 CFR 1910.120, and 40 CFR 262.34, 40 CFR 264.16, and 265.16.

29 CFR Parts 1910.101 - 1910.120, Hazardous Materials.

Historic and Cultural ResourcesCultural Resources

What Are They?

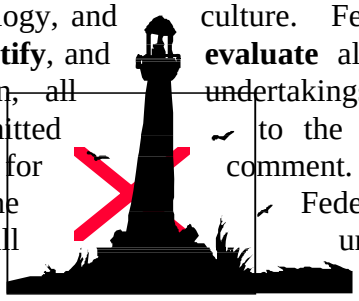
Many Coast Guard facilities are rich in historic and cultural resources such as historic lighthouses, prehistoric settlement sites, historic archeological sites, and 19th century cantonments. "Historic and Cultural Resources" is a term used to describe historic properties as defined by the National Historic Preservation Act, but more important, includes archeological, social, and historic resources beside those eligible for the National Register of Historic Places. Folk-life, traditions, religious practices, and other social institutions such as community lifeways are included. These represent a link to our past and are nonrenewable resources that enhance our lives.

As facility activities or new missions occur, areas containing historic and cultural resources must be identified and evaluated. A process must be developed to manage these resources in a manner that ensures that our heritage is preserved.

Current Regulations

Congress passed the National Historic Preservation Act (NHPA) in 1966 to help prevent the loss of irreplaceable historic properties. The Act created the Advisory Council on Historic Preservation (Council) to advise the President and Congress on matters involving historic, archeological and cultural preservation. The Council is authorized to review and comment on all Federal undertakings that may have an effect upon properties listed in the National Register of Historic Places or eligible for such listing.

The criteria of the National Register of Historic Places are used to determine "significant" properties. Under the direction of the Secretary of the Interior, the Register includes districts, sites, buildings, structures, and objects significant in American history, architecture, engineering, archeology, and culture. Federal land managers must develop programs to **locate**, **identify**, and **evaluate** all historic resources under their jurisdiction. In addition, all undertakings that may effect any historic resources must be submitted to the appropriate State Historic Preservation Officer (SHPO) for comment. A Memorandum of Agreement (MOA) between the Federal agency and the Council must be adopted for all undertakings that may have an adverse effect on a historic property. Failure to complete the review procedures can result in litigation, forcing the land manager to stop the undertaking until the review is completed.



The Archeological Resources Protection Act (ARPA) of 1979 (Public Law 96-95; 16 U.S.C. 470aa-11) prohibits the removal, sales, receipt, and interstate transportation of archeological resources obtained illegally (without permits) from public or Native

American lands; provides substantial criminal and civil penalties; and authorizes agency permit procedures for investigations of archeological resources on public lands under the agency's control. Federal land managers are directed to consult with Native American tribes to identify sites of religious or cultural importance (43 CFR section 7.7 (4)).

The Native American Graves Protection and Repatriation Act of 1990 prohibits the intentional removal of Native American cultural items from Federal or tribal lands, except under an ARPA permit and in consultation with the appropriate Native American groups. The Act provides for the return of burial remains, associated funerary objects and objects of cultural patrimony to the appropriate tribes. It establishes Native American ownership of human remains and associated artifacts discovered on Federal lands after the date of enactment. Discoveries of Native American remains during project construction activities can result in significant project delays.

The American Indian Religious Freedom Act (AIRFA) requires consideration of Native American religious practices, which may or may not be associated with physical places on the land. Executive Order 13007 deals with "Indian sacred sites," which are physical places that may or may not be eligible for the National Register. Agencies are to seek ways to avoid physical damage to such sites, and avoid blocking access to them by Indian religious practitioners.

The National Environmental Policy Act (NEPA) requires agencies to consider the effects of their actions on "the human environment," which must include all cultural as well as natural aspects of the environment. A thorough environmental analysis under NEPA generally addresses impacts on historic properties, other culturally valued pieces of real property, cultural use of the biophysical environment, and such "intangible" sociocultural attributes as social cohesion, social institutions, lifeways, religious practices, and other cultural institutions. These impacts are usually analyzed either as impacts on "cultural resources," or as "social impacts," or as both.

The Coast Guard's Program

Objectives…

- Integrate the historic and archeological cultural resource protection requirements of applicable laws, regulations, and other mandates with the planning and management of activities under Coast Guard control;
- Encourage practical, economically feasible maintenance, rehabilitation and adaptive reuse of National Register resources under Coast Guard control;
- Protect significant archeological resources; and
- Provide access to Native American sacred sites.

Commanding Officers should…

- Plan, program, and budget for adequate compliance with historic and archeological resources protection requirements as it applies to historic resources under Coast Guard control or that may be affected by Coast Guard activities;
- Provide for the professional identification, evaluation, inventory, nomination, and protection of resources under Coast Guard control which appear to be eligible for the National Register;
- Ensure that all legally mandated procedures are followed if National Register resources under Coast Guard control are to be transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly;
- Consult with SHPO and the Advisory Council whenever proposed undertakings may effect any National Register eligible resources, and enter into an MOA regarding treatment of any adverse effects;
- Ensure that discovered archeological resources are protected at the site of discovery until the Secretary of Interior has been notified and cultural resource professionals have evaluated and advised regarding protection or recovery;
- Use historic buildings in their existing or original conditions, whenever practical and available, instead of new acquisitions, construction, or leasing to satisfy mission requirements;
- Ensure that funds budgeted for historic preservation are applied to National Register eligible resources;.
- Ensure that Native American religious practices and the effects of Coast Guard actions on them are respectfully considered; and
- Ensure that Indian sacred sites do not sustain physical damage, and avoid blocking access to them by Indian religious practitioners.

References

COMDTINST M16475.1 (series), "National Environmental Policy Act Implementing Procedures."

COMDTINST M16475.1 (series), "National Environmental Policy Act Implementing Procedures."

National Historic Preservation Act as amended (Public Law 89-655; 80 Stat. 915, 16 U.S.C. 470).

National Historic Preservation Act regulations (Title 36 CFR Part 63 and 36 CFR Part 800).

Title 36 CFR Part 60 (National Register criteria).

National Environmental Policy Act (42 U.S.C. 43 et. seq.).

Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1500).

Archaeological Resources Protection Act of 1979 (Public Law 96-05; 16 U.S.C. 470 aa-ll).

The American Indian Religious Freedom Act (AIRFA) (92 Stat. 469; 42 U.S.C. 1996)

Native American Grave Protection and Repatriation Act of 1990 (Public Law 101-601).

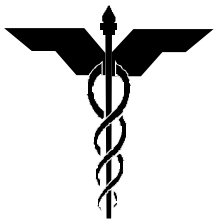
Executive Order 11593, Protection and Enhancement of the Cultural Environment.

Executive Order 13007, Indian Sacred Sites.

Executive Order 13084 Consultation and Coordination with Indian Tribal Governments.

Infectious Waste

What Is It?



Infectious waste is waste that contains pathogens of sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in the transmission of an infectious disease. Infectious waste may, under certain circumstances, include such items as medical waste from isolation rooms, microbiological wastes, blood and blood products, pathological wastes, sharps (hypodermic needles, syringes, scalpel blades, etc.), and contaminated animal carcasses, body parts, and bedding.

Current Regulations

Infectious wastes are included under the Solid Waste Disposal Act (SWDA) of 1965 as amended by Resource Conservation and Recovery Act (RCRA). This legislation requires that Federal facilities comply with all Federal, state, interstate, and local requirements concerning the disposal and management of solid wastes. Such requirements include permitting, licensing, and reporting. The Environmental Protection Agency (EPA) classifies health care facilities as generators of infectious waste based on the weight of waste generated. All Coast Guard clinics are considered generators.

The U.S. Public Vessel Medical Waste Anti-Dumping Act of 1988, which updated the Marine Protection, Research, and Sanctuaries Act of 1972, was enacted to control the washing ashore of potentially infectious medical waste from public vessels.

The Coast Guard's Program

Objectives…

- Comply with all Federal, state, interstate and local requirements, both substantive and procedural (including any requirements for permits or reporting), respecting control and abatement of medical waste disposal and management including the payment of reasonable service charges.

Commanding Officers should…

- Maintain a record of the types and amounts of infectious medical wastes generated per month. Records are to be maintained no less than five years;.

- Segregate potentially infectious medical wastes according to the following procedures:

  - Sharps shall be collected in plastic autoclavable sharps containers. To avoid creating infectious aerosols, needles shall not be clipped
  - Other potentially infectious medical wastes shall be double-bagged in biohazard disposal bags (e.g., NSN 6530-01-107-5798 or 6530-01-107-5799)
  - Properly label all infectious medical wastes as medical wastes

- Store infectious medical wastes in a secure area until transported and disposed; and

- Determine if the retention of potentially infectious wastes aboard a cutter would endanger the health and safety of personnel on board, create an unacceptable nuisance condition, or compromise operational readiness; if so overboard discharge is authorized beyond 50 miles provided such waste (excluding sharps) has been properly sterilized and packaged.

References

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST M5100.47, "Safety and Environmental Health Manual."

Landscaping Practices

What Are They?

Environmentally beneficial landscaping incorporates landscaping practices that improves or conserves the environment. These practices include the use of regionally native plants, best management practices (BMP), and environmentally sensitive landscaping plans. Federal landscaping practices are not directly regulated, however President Clinton released a Memorandum on Environmentally Beneficial Landscaping (April 26, 1994) directing that agencies shall use environmentally beneficial landscaping where cost-effective and to the extent practicable.

Regionally native plants are hardy and adapted to local conditions and therefore have low to no requirements for water, fertilizers and pesticides. Herbaceous native plants are more effective than conventional turf grasses in stabilizing erosive soils, and soils in areas of moving water. When established, they increase storm water infiltration into the soil, and can intercept sediments and nutrients in urban and agricultural runoff. They also provide excellent habitat for songbirds and small animals, and as an alternative to mowed grassy areas they save maintenance and mowing time.

BMP's are a series of practical approaches to reduce non-point runoff. They include:

- reducing fertilizer use by matching applications to plant nutrient needs by using soil testing;
- avoiding fertilizer applications in periods of high leaching and runoff potential;
- placing a thick layer of mulch in flower and plant beds to reduce water evaporation losses and to increase water infiltration and decrease surface runoff;
- recycling grass and plant materials by collecting and composting them (or by leaving grass clippings on the lawn to decompose after mowing);
- decrease water losses by using efficient irrigation systems such as drip hoses and by irrigating at times of low evaporation potential; and
- reducing pesticide runoff by incorporating integrated pest management (IPM) into the landscaping practices (see Pest Management section, page 83).

Environmentally sensitive landscape planning includes the creation of a variety of planting zones that are made to compliment or enhance the existing environment as much as possible. Examples of this are planting herbaceous, fast-growing native plants with deep root systems on steep slopes, or areas of high water erosion potential, or growing native shade trees next to buildings to reduce air conditioning demands. Some areas can be planted with plants selected for their function as food source and/or habitat for native birds or small animals.

Commanding Officers should…

- Encourage the use of native species suited to local climate and soils in facility landscaping. Where possible, choose disease and insect resistant plants;
- Incorporate Best Management Practices into facility landscaping maintenance; and
- Encourage use of Pesticides/Integrated Pest Management (IPM).

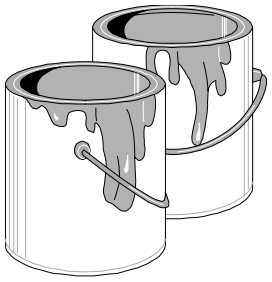
References

COMDTINST M5090.3, "Natural Resource Management"

Presidential Memorandum on Environmentally Beneficial Landscaping. April 26, 1994.

Lead

What Is It?



Lead is a naturally occurring mineral which, when added to paints and coatings, improves strength, appearance, and resistance to atmospheric and marine deterioration. In the late 1970's, many such applications in residential and public buildings were banned by the Consumer Product Safety Commission for health reasons. Lead can be ingested through paint chips and peeling, and inhaled through dust created when maintenance or removal work is done and ingested via drinking water that has absorbed lead from pipe solder. (Reference Drinking Water, Page 3131??). Exposure to lead by ingestion is known to cause permanent brain damage and other adverse effects, especially in children. Paints and other coatings containing lead have been used extensively by the Coast Guard in housing units, vesselcutters, steel structures, and elsewhere.

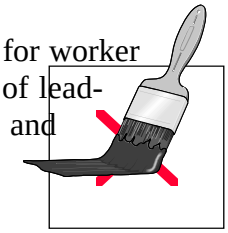
Current Regulations

The Residential Lead-Based Paint Hazard Reduction Act of 1992 regulates the removal of lead-based paint, lead-contaminated dust, lead-contaminated soil, and all preparation, cleanup, disposal, and post abatement testing activities associated with abatement. This Act requires Federal departments to conduct studies of lead in structures, including housing, and to provide results to the Environmental Protection Agency (EPA).

The Toxic Substances Control Act (TSCA) waives Federal sovereign immunity regarding lead-based paint, lead-based paint activities, and lead-based paint hazards. This allows states to require USCG units to pay reasonable service charges, administrative orders, and all civil and administrative penalties and fines.

The treatment of lead under this law is very similar to the treatment of asbestos under the Clean Air Act (CAA). The law requires training and certification of workers who work in activities where lead emissions may be released.

The Occupational Safety and Health Administration (OSHA) sets limits for worker exposure on the job. The EPA regulates the management and disposal of lead-containing waste, lead-based paint, lead-contaminated dust and soil, and testing activities.



The Coast Guard's Program

Objectives…

- Comply with current EPA or state laws whichever is more stringent;
- Reduce occupational exposure to airborne lead;
- Reduce use of paints, coatings, and similar applications containing lead in construction, overhaul, and repair and maintenance of Coast Guard ships and shore facilities;
- Mitigate painting of all structures with an apparent risk to children from lead-based paint which is chipping or peeling; and
- Review contract specifications where necessary to reduce and prevent use of lead paints, coatings, and similar applications.

Commanding Officers should…

- Ensure compliance with applicable Federal and state regulations;
- Procure and use paints having lead less than 0.05 percent by weight and VOCs less than 340 gm/ltr;
- Reduce occupational exposures to airborne lead during rehabilitation or repair work;
- Identify, evaluate, and manage lead presence in Coast Guard owned housing and child development centers;
- Ensure that painted surfaces are tested for lead prior to demolition;
- Ensure that staff receive proper training before removing lead-based paint from housing or other structures;
- Ensure that criteria contained in Coast Guard health and environmental guidance are understood and complied with by affected personnel, including sampling and analysis procedures and air quality monitoring;
- Implement appropriate lead mitigation actions for structures and surfaces when tests are positive for the presence of lead in paint, dust, or soil;
- Ensure that all health and environmental standards are applied in the acquisition of goods and services, and during the design and construction stages of new or upgraded facilities;

- Ensure that all command publications, instructions, manuals, specifications, and technical orders which contain health and environmental provisions are reviewed and updated to conform to existing Coast Guard standards; and,

- Consult with your servicing Civil Engineering Unit (CEU), Maintenance and Logistics Command (s), (k), (v), or the Environmental Management Division (G-SEC) (for Headquarters' units) for details about testing, abatement, and disposal of lead-containing waste.

References

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST 6260.1, "Asbestos, Lead, and Radon in Coast Guard Housing."

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M5100.47, "Safety and Environmental Health Manual."

COMDTINST M10630.3A, "Coating and Color Manual."

29 CFR 1910.1025, OSHA Standards for Lead.

Liabilities and Penalties

What are they?

Civil and criminal penalties may result from improper environmental stewardship. State and Federal law enforcement authorities are prosecuting environmental offenders with increasing regularity. Coast Guard Commanding Officers and other Federal employees are not immune from prosecution for environmental offenses and place themselves at great risk in the event they commit environmental offenses.

As public interest in protecting the environment builds, the array of laws and regulations that govern environmental operations on Federal facilities continues to grow. These laws are complex, and may have criminal provisions that can be used as a basis for prosecution in the event of violations (see the following chart). All Coast Guard personnel, both military and civilian, must consider environmental compliance in their daily operations. Attention to compliance with environmental laws is particularly important for those who work in industrial facilities and seagoing operations.

The Environmental Protection Agency (EPA) has focused attention on ensuring that Federal facilities comply with environmental laws. In addition, the Federal government is committed to being a leader in environmental compliance in its operations. The Commandant has made clear in his Environmental Policy Statement that the Coast Guard's goal is to manage the land, sea, and air resources, under its cognizance, in an environmentally responsible manner.

Current Regulations

The Federal Facility Compliance Act (FFCA) allows EPA to levy fines against other Federal agencies for environmental noncompliance. In addition, FFCA allows state regulatory agencies to assess administrative penalties and fines against Federal agencies for environmental violations, specifically for hazardous waste. This change presents a dramatic departure from past practice and may affect budgets for all Federal facilities. Payment of an unanticipated fine could be detrimental to a carefully planned facility budget.

Federal prosecutors have been instructed to prosecute the highest level officials who are responsible for noncompliance. In the Coast Guard, this could be the unit Commanding Officer. Several Federal employees from other agencies have been criminally prosecuted for environmental violations committed in the course of their work. Such violations can erode public trust and confidence in the government and can lead to penalties, fines, legal expenses, and criminal prosecution for violators. Consequently, any threat of a criminal penalty should be immediately reported up the operational chain of command. Coast Guard personnel must continue to carefully assess their compliance in order to avoid such penalties, fines, and prosecution. Maintaining a good environmental compliance record will require the continued attention and hard work of Coast Guard personnel.

References

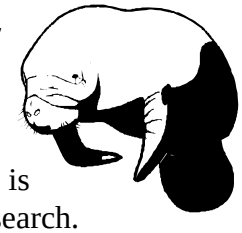
COMDTINST M7100.3A, "Financial Resources Management Manual." - policy on the payment of fines and penalties

Maximum Penalties for Violating Federal Environmental Requirements

Environmental Statute	Civil Penalties	Criminal Penalties	
	Noncompliance	Willful Violation	Withheld or Falsified Information
Archeological Resources Protection Act (ARPA)	$20,000/day 2 years prison	$100,000 5 years prison	--
Clean Air Act (CAA)	$25,000/day Injunction Minor Violations (routine record keeping violations) $0 to $5,000/day	$25,000/day 2 year prison	$10,000/day 6 mos. Prison
Clean Water Act (CWA)	$10,000 to $20,000/day Injunction	$50,000/day 3 years prison	$10,000/day 2 years prison
Endangered Species Act (ESA)	$25,000/day	$5,000 to $50,000 3 years prison	$10,000 2 years prison
Federal Facilities Compliance Act (FFCA)	$25,000/day	--	--
Safe Drinking Water Act (SDWA)	$27,500/day Compliance order	$50,000 5 years prison	--
Marine Mammal Protection Act	$10,000	$20,000 1 year prison	--
Marine Protection, Research, and Sanctuaries Act (MPRSA)	$50,000 Medical Waste: $125,000/day	$50,000 1 year prison Medical Waste: $250,000 5 years prison	--
Rivers and Harbors Act	Injunction	$2,500/day 1 year prison	--
Resource Conservation and Recovery Act (RCRA)	$27,500/day Injunction	$50,000/day 1 year prison	--
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)	$1,000	$1,000 1 month prison	--
Toxic Substances Control Act (TSCA)	$27,500/day Injunction	$25,000 1 year prison	--
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)	--	$10,000/day 1 year prison	$20,000/day 1 year prison
Noise Control Act	$10,000/day	$25,000/day	1 year prison

Marine Mammal Protection Act

What Is It?



The Marine Mammal Protection Act (MMPA) of 1972 (16 USC 9~ 1361 to 1421(h)) is intended to help maintain the stability of the marine ecosystem, and to maintain an optimum sustainable marine mammal population, keeping in mind the carrying capacity of the habitat. The Act prohibits taking or importing marine mammals unless a permit is issued for purposes of public display, native subsistence or scientific research.

As with the ESA in the context of endangered and threatened species, the Marine Mammal Protection Act prohibits "takings" of marine mammals; that is, to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect or kill any marine mammal. Although the MMPA does not mandate designation of critical habitat or preparation of recovery plans, it does mandate conservation plans that should closely align with Endangered Species Act recovery plans, if available.

The National Marine Fisheries Service is responsible for the management and conservation of whales, dolphins, seals, and sea lions. The U.S. Fish and Wildlife Service is responsible for manatees, dugongs, marine otters, sea otters, polar bears, and walruses.

The Coast Guard's Program

Commanding Officers should…

- Avoid encounters with marine mammals whenever possible, through the use of Standard Operating Procedures;
- Ensure that all necessary permits are acquired and consultations with NMFS are conducted when work which may impact marine mammals, such as construction or maintenance near beaches used by marine mammals for breeding, is scheduled; and
- Ensure that the chain of command is notified of any prohibited encounters with marine mammals.

References

COMDTINST M5090.3, "Natural Resources Management."

Marine Mammal Protection Act [16 USC 1361 to 1421(h)].

MMPAA Implementing Regulations [50 CFR 10 (prohibitions on taking, possession, sale, etc.), 18 (regulations regarding polar bears, sea otters, walruses, dugongs, and manatees), 216 (regulations regarding whales, seals, and sea lions), and 228 (incidental takes)].

National Environmental Policy Act (NEPA)

What is it?

The National Environmental Policy Act is the national charter for environmental planning and protection of the environmentand encourages productive harmony between man and his environment. NEPA mandates the integration of environmental considerations into the overall planning process of Federal agencies. NEPA requires Federal agencies to:

- Identify and analyze environmental consequences of proposed Federal actions in comparable detail to economic and operational analysis;
- Assess reasonable alternatives to the agency's proposed action;
- Document the environmental analysis and findings; and
- Make environmental information available to agency decision makers, public officials and citizens before agency decisions are made.

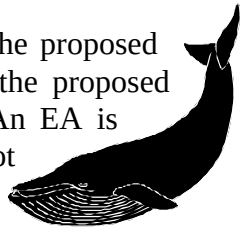
The failure to meet the requirements of NEPA can often result in delays or even prevent a project from being completed.

Current Regulations

In the first phase of the NEPA process, the lead Federal agency proposing the action conducts an environmental review of the proposed action to determine whether significant environmental impacts may be expected and whether changes can be made to the proposed action to eliminate these impacts. An environmental review determines whether a proposed action can be excluded from detailed environmental documentation (a Categorical Exclusion), or whether an Environmental Assessment (EA) or Environmental Impact Statement (EIS) must be prepared. The three progressive levels of environmental documentation are as follows:

1. Categorical Exclusion (CE) - required for actions which do not have, under normal circumstances, a significant individual or cumulative effect on the human environment. The USCG maintains a list of categories of projects that have been predetermined to not require the additional more detailed environmental analysis typical of an EA or EIS.

2. Environmental Assessment (EA) - required if there is no CE for the proposed action, if the potential for significant impacts is unknown, or if the proposed action has the potential to adversely impact the environment. An EA is assessment of the extent of environmental impacts and whether or not those impacts are significant. An EA typically takes 4 to 6 months to complete. If the preparation of an EA indicates that no significant environmental impacts are anticipated, a Finding of No Significant Impact



(FONSI) is issued. If significant impacts are anticipated they must be mitigated to a level where they are no longer significant, or an EIS must be prepared.

3. Environmental Impact Statement (EIS) - required for proposed actions that are likely to have significant impacts on the environment. The EIS is the most detailed level of environmental documentation required under NEPA. The EIS must contain a full, fair, yet concise discussion of all significant environmental impacts relating to a proposed action. An EIS typically takes 1 to 2 years to complete and will be more costly than an EA. The EIS process concludes with a Record of Decision (ROD) that documents how the agency intends to deal with the significant environmental impacts in its decision.

The Coast Guard's Program

Commanding Officers should…

- Assist in reviewing potential environmental impacts (this includes impacts to historic and cultural resources) associated with a proposed action at the initial planning stage;
- Ensure no irreversible action is taken unless appropriate NEPA analysis and documentation has been completed;
- Participate in the formulation of, and ensuring commitment to, EA/FONSI and EIS/ROD conclusions and any mitigation and monitoring requirements established;
- Encourage, by all means possible, a sense of environmental responsibility and awareness among personnel to implement most effectively the spirit of NEPA; and
- Consult with your servicing Civil Engineering Unit (CEU), legal office, Maintenance and Logistics Command (MLC), Environmental Management Division (G-SEC) (for Headquarters' units), Naval Engineering Support Units (NESU), or Naval Engineering Division (G-SEN) on any environmental issues or questions.

References

COMDTINST M16475.1 (series), "National Environmental Policy Act Implementing Procedures."

National Environmental Policy Act (42 U.S.C. 43 et. seq.).

Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1500).

46 Federal Register 18026 (March 23, 1981), as amended, 51 Federal Register 15618 (April 25, 1986), CEQ Memorandum: Forty Most Asked Questions Concerning CEQ's NEPA Regulations.

Memorandum: Scoping Guidance (CEQ, April 30, 1981).

Noise Prevention

What Is It?

Noise is "sound without value." Intensity of sound is commonly thought of as loudness and is measured in units called decibels (dB). A zero on the decibel scale represents the lowest limit of human audible perception; the level of normal conversations is approximately 60 dB. The dB scale is logarithmic which implies that as the dB level of sound increases by 10 units, the intensity or energy increases by a factor of 10. For instance, a dB value of 70 represents 10 times the energy of 60 dB.

Studies have shown that long-term exposure to excessive or moderate intensities of noise for long durations causes damage to the high frequency end of the human hearing spectrum. This accounts for many reports of a constant high-toned ringing. Other physiological changes that occur when the brain senses noise are a dilation of blood vessels, rise in blood pressure, change in hearth rhythm, and a rise in the blood cholesterol level. The presence of noise is also associated with psychological stress resulting in headaches, irritability, nervousness, and aggressive behavior.

Current Regulations

In 1970, Congress passed the Noise Pollution Prevention and Abatement Act, which was chiefly responsible for investigating the effects of environmental noise on public health.

The Noise Control Act of 1972 set the goal of protecting all Americans from noise that jeopardizes their health and welfare. This legislation was designed to establish noise standards, and to regulate noise emissions from commercial products such as transportation and construction equipment.

The Quiet Communities Act of 1978 amended the Noise Control Act by providing state and local governments with funds to promote the development of noise control programs on a local level as long as the actions at the local level are consistent with Federal regulations. In this regard, numerous state and local governments have developed their own environmental noise regulations.

The Coast Guard's Program

Continuous noise levels exceeding 84 dBA (decibels, A scale) are considered hazardous. For unit hearing conservation programs, COMDTINST M5100.47, Safety and Environmental Health Manual, requires the following:

- Comply with local noise ordinances;

- Identify, assess, and post placard hazardous noise sources;
- Determine the extent and disposition of personnel exposed; engineer methods to abate noise;
- Provide and require the use of hearing protectors for all personnel exposed to hazardous noise; and,
- Educate and advise personnel concerning hearing conservation; and monitor employee hearing acuity using trained audiometric technicians in certified audiometric booths.

As maintenance and operational requirements permit, the use of powered tools, machinery, topside loudspeakers, or any other devices that emit excessive noise, either directly or indirectly through re-radiation, aboard cutters in port and shore unit activities on boats and buildings, should be restricted to normal daylight working hours to the maximum extent possible.

References

COMDTINST M5100.47, "Safety and Environmental Health Manual."

The Federal regulations concerning noise abatement programs are contained in Title 40 CFR Parts 201 through 211.

Notice of Violation or Notice of Noncompliance

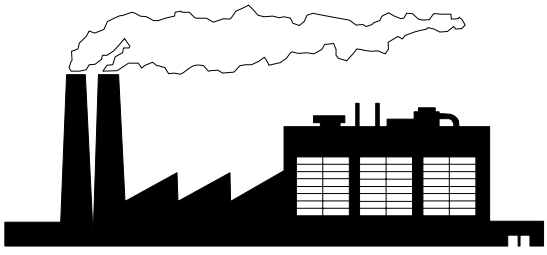
What Are They?

If noncompliance is determined as a result of a regulatory inspection, the regulatory agency will issue your facility a Notice of Violation (NOV) or a Notice of Noncompliance (NON). Coast Guard policy requires you to **immediately** notify the district legal office, Commandant (G-LEL), and Maintenance and Logistics Command [MLC (1)] when you receive a NOV/NON from either the Environmental Protection Agency (EPA) or a state regulatory agency. Most NOV/NONs can, and should, be negotiated and resolved between the unit and the regulatory agency. The NOV/NON will prescribe what you must do (but not how to do it) and the timelines to meet compliance. Generally, you will have approximately 30 days to respond to the regulatory agency. (The type of NOV/NON you actually receive and the timetable to respond may vary by program area.)

If you fail to adequately respond to the NOV/NON, or you are late in responding, the EPA or the state will seek to negotiate a Compliance Agreement or Consent Order. They may also seek a Compliance Agreement or Consent Order immediately, if they feel there is an imminent and substantial endangerment to human health or the environment. The negotiated Compliance Agreement or Consent Order will specify what actions must be completed and in what time frames.

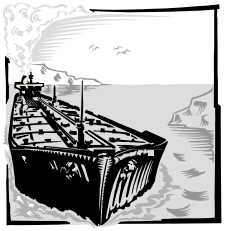
If you determine that you have compliance deficiencies by some other means (normally through self-inspection), you should alert the legal office which advises your command and contact your CEU, MLC (v), (s), and (l), G-SEC (for Headquarters' units), or G-SEN to determine your best course of action.

Civil or criminal penalties, and even operational shutdown, can result from improper environmental stewardship, especially in situations where repeated warnings through NOV/NONs have been ignored.



Ocean Dumping

What Is it?



Dumping refers to the intentional disposition of materials, including sinking/disposing of ships. Dumping does not include routine discharge of effluent incidental to the propulsion or operation of motor driven equipment on cutters. It does, however, include the discharge of contaminated material, including bilge water, received from another ship or shore source. "Graywater" (from galleys, sinks, and showers) generated on the cutter can be discharged in areas that permit graywater discharge. Discharge of sewage is prohibited in areas inside of the U.S. 3-mile limit.

Current Regulations

The Marine Protection, Research, and Sanctuaries Act (MPRSA), Title I - Ocean Dumping, bars transporting of any material from Coast Guard cutters and aircraft from the U.S. for the purpose of dumping into the ocean waters without a permit issued by the Environmental Protection Agency (EPA) and dumping any material from outside the U.S. within the territorial sea or contiguous zone. The EPA has authorized burial at sea of human remains under a general permit at 40 CFR 229.1.

The International Convention for the Prevention of Pollution from Ships (MARPOL 73/78 Annex V) is addressed under the Act to Prevent Pollution from Ships (APPS), the Ocean Dumping Ban Act of 1990, and 33 CFR 151.51

The Coast Guard's Program

- Ocean dumping may only be authorized on a case-by-case basis by the Commandant; and

- Any material may be dumped from ships and aircraft in an emergency in order to safeguard life at sea.

Commanding Officers should…

- Assure that all discharge restrictions under MARPOL 73/78 Annex V are adhered to, especially the restrictions for plastics (no discharge allowed), oils (< 15 ppm oil-no sheen) and trash (varying requirements depending on the number of miles offshore); and

- Assure that all engineering systems related to sewage treatment, bilge water, and other systems capable of discharging substances to the marine environment are in proper working order and meet discharge requirements.

References

COMDINST 1770.1C

33 CFR Parts 151.51-73 – regulations for cutters 40 CFR Parts 220-225 and 227-229 contain Ocean Dumping Regulations and Criteria.

33 U.S.C. 1901, APPS.

409 CFR 117, “Hazardous Substances and Reportable Quantities.”

Annex II MARPOL

OPNAVINST 5080.1

Oil and Hazardous Substance Pollution Contingency Plans

What Are They?

This section deals with Coast Guard policy and contingency plans for oil discharges or hazardous substance releases. A discharge, as defined by the Clean Water Act (CWA), includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil. A release, as defined by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injection, escaping, leaching, dumping, or disposing into the environment of a hazardous substance.

Current Regulations

CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA), requires the Environmental Protection Agency (EPA) to promulgate revisions to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300). The Oil Pollution Act (OPA) of 1990 updated the NCP. NCP establishes the national framework for planning and respondingse to oil discharges and hazardous substances (HS) releases. The NCP assigns responsibilities for oil and hazardous substance spill contingency planning and response to various Federal agencies, including the Coast Guard, and outlines state and local government and public and private interest group participation in these areas. The NCP also specifies notification procedures for certain discharges and HS releases.

The CWA is the major Federal statute addressing improvement of the nation's water resources. The CWA, which amended Section 311 of the Federal Water Pollution Control Act of 1972, deals with the prevention of and response to oil and hazardous substance spills into or upon the navigable waters of the United States or the contiguous zone. The CWA prohibits such discharges in quantities that are determined to be harmful to the public health or the environment.

The Emergency Planning and Community Right-to-Know Act (EPCRA) focuses on the hazards associated with toxic chemical releases. Most notably, specific sections of EPCRA require immediate notification of off-site releases exceeding reportable quantities of extremely hazardous substances (EHSs) and CERCLA-defined hazardous substances (HS) to state and local emergency response planners.

The Resource Conservation and Recovery Act (RCRA) was established to protect human health from the hazards associated with solid wastes and hazardous waste (HW) generation, transportation, treatment, storage, and disposal. Subtitle C of RCRA imposes specific requirements for developing spill contingency plans on the owners and operators of HW facilities.

The Occupational Safety and Health Act requires various levels of training for personnel involved in HW cleanup and emergency response operations.

In addition, most state regulatory programs contain provisions for oil and hazardous substance pollution contingency planning and notification of state and local authorities of oil and hazardous substance (OHS) spills.

The Coast Guard's Program

Objectives…

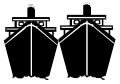
- Prepare for oil and hazardous substance pollution incidents and where such incidents occur, take immediate, direct action to minimize the harmful effects on the environment.

Commanding Officers should…

- Develop and annually update, as appropriate, unit oil and hazardous substance spill contingency plans in a format prescribed by the Commandant, and consistent with applicable District Commander and Federal On-Scene Coordinator plans;

- Prepare for oil and hazardous substance pollution incidents through preventive measures including scheduled training and exercises;

- Where incidents do occur, undertake immediate, direct action to mitigate and clean up oil and hazardous substance spills to minimize the harmful effects on the environment; and



- Cutters of 400 gross tons or above should prepare and maintain on board an approved oil pollution emergency response plan when transiting the navigable waters of the U.S.

References

COMDTINST M16600 (series), "Marine Safety Manual."

COMDTINST 16451.5A, "Policy Guidance for Intervention in Ship-Related Marine Pollution Incidents on the High Seas and on the Navigable Waters of the U.S.," February 1, 1988.

COMDTINST 16450.32A, "Guidelines for the Implementation and Enforcement of Vessel Response Plans, Facility Response Plans, and Shipboard Oil Pollution Emergency Plans."

COMDTNOTE 16478, "Facility Response Plans."

COMDTPUB P16480.1, "Emergency Planning, Preparedness, and Prevention Guide for Oil Spills and Hazardous Substances Releases."

Oil Pollution Act of 1990 (33 U.S.C. 40).

Occupational Safety and Health Act (29 U.S.C. 15).

29 CFR 1910.120, “Hazardous Waste Operations and Emergency Response.”

33 CRF Parts 151.51, 154 Subpart F, 156, and 40 CFR Parts 220-225 and 227-229 contain Ocean Dumping Regulations and Criteria.

33 CFR 155 Subpart D, “Vessel Response Plans.”

40 CFR 112, “Oil Pollution Prevention.”

33 U.S.C. 1901. “Act to Prevent Pollution from Ships (APPS).”

Sewage - Section 312 of the FWPCA (33 U.S.C. 1322).

Noxious Liquid Substance - Refer to guidelines in “Ship’s Procedures” and “Arrangements Manual” for detailed restrictions.

Hazardous Substances and Reportable Quantities listed in 40 CFR 117.

Annex II MARPOL.

Ozone Depleting Substances

What is Ozone?

Ozone is a highly reactive form of oxygen. High concentrations of ozone in the upper atmosphere absorb high energy sunlight (ultraviolet radiation) before it comes in contact with the earth's surface. Too much exposure to ultraviolet light has been shown to cause skin cancer. It is believed that many air pollutants are causing depletion of the upper atmospheric ozone.

Ground level ozone forms when there is a chemical reaction between hydrocarbons such as nitrogen oxides in the presence of heat and sunlight. Some of the sources for these hydrocarbons are automobile exhaust, gasoline, paint solvents, and cleaning agents. Ozone at the ground level causes health problems by damaging lung tissue, reducing lung function, and sensitizing lungs to other irritants.

What Are Ozone Depleting Substances?

Chlorofluorocarbons (CFCs) and halons are recognized as ozone depleting substances (ODSs). CFCs and halons are highly stable compounds that remain intact when they are released into the air. They break apart only when they reach the stratosphere, releasing chlorine and/or bromine, which destroy the earth's ozone layer. CFCs, introduced in the 1930s, are mainly used by the Coast Guard as refrigerants and solvents. Their application as aerosol propellants was banned in the U.S. in 1978. Halons have been used in the U.S. since the early 1970s as firefighting agents, both in military and civilian applications.

Current Regulations

Concerns about this environmental hazard resulted in the Montreal Protocol, an international agreement to protect the ozone layer. It was ratified by the U.S. Senate and became effective on January 1, 1989. The Montreal Protocol places progressively tightening restrictions on the annual consumption (i.e., production plus imports) of ozone depleting substances, the most recent additions of which are carbon tetrachloride and methyl chloroform (1,1,1-trichloroethane). The Clean Air Act Amendments of 1990 accelerated the ban on Class I CFC production to 1 January 1996 and banned halon production after 1 January 1994, while all Class II substances will be phased out from production by 2020. (see the following tables).

The Coast Guard's Program

Objectives…

- Establish a CFC and halon reserve agreement with the Defense Logistics Agency (DLA);
- Maintain compliance with venting prohibitions at all times;
- Use only DLA supplied ODS compounds on an as needed basis - stockpiling of ODSs is not allowed;
- Phase out ODSs over the next few years in accordance with Coast Guard mission requirements through research, replacement, and minimization;
- Modify training, maintenance, and testing procedures so that personnel are properly certified as required in the regulations;
- Promote recycling and other conservation practices;
- Promote substitution of non-ozone depleting substances;
- Following FAR requirements, revise contract specifications where necessary to minimize use of ozone depleting substances; and
- Prohibit disposal of ozone depleting substances by direct release to the atmosphere (i.e., venting during maintenance).

Commanding Officer should…

- Implement appropriate ozone depleting substance procurement and requisition procedures;
- Establish procedures to eliminate emissions of ozone depleting substances to the atmosphere, and modify operations, training, and testing practices accordingly;
- Ensure that staff members are certified as required before servicing air conditioning or refrigeration equipment;
- Adopt conservation practices, such as substitution of non-ozone depleting substances and recycling of ozone depleting substances, where possible, and consistent with mission requirements; and
- Annually monitor the quantities of ozone-depleting substances acquired, used, and returned.

Clean Air Act Amendments of 1990 Class I and Class II Substances

Class I Substances[a] - Banned From Production by 1996 (1994 for Halons)				
Group I	**Group II**	**Group III**	**Group IV**	**Group V**
CFC-11	Halon-1211	CFC-13	Carbon	Methyl
CFC-12	Halon-1301	CFC-111	Tetrachloride	Chloroform
CFC-113	Halon-2402	CFC-112		
CFC-114		CFC-211		
CFC-115		CFC-212		
		CFC-213		
		CFC-214		
		CFC-215		
		CFC-216		
		CFC-217		

Class II Substances[b] - Banned From Production by 2015		
HCFC-21	HCFC-142b	HCFC-235
HCFC-22	HCFC-221	HCFC-241
HCFC-31	HCFC-222	HCFC-242
HCFC-121	HCFC-223	HCFC-243
HCFC-122	HCFC-224	HCFC-244
HCFC-123	HCFC-225ca	HCFC-251
HCFC-124	HCFC-225cb	HCFC-252
HCFC-131	HCFC-226	HCFC-253
HCFC-132b	HCFC-231	HCFC-261
HCFC-133a	HCFC-232	HCFC-262
HCFC-141b	HCFC-233	HCFC-271
	HCFC-234	

Source: Clean Air Act Amendments of 1990, sections 602(a) and (b).

[a] CFC stands for chloroflourocarbon. The Amendments state: "The initial list under this subsection [of the act] shall also include the isomers of the substances listed above, other than 1,1,2-trichloroethane (an isomer of methyl chloroform). Pursuant to subsection (c), the [Environmental Protection Agency] Administrator shall add to the list of Class I substances any other substance that the Administrator finds causes or contributes significantly to harmful effects on the stratospheric ozone layer. The Administrator shall, pursuant to subsection (c), add to such list all substances that the Administrator determines have an ozone depletion potential of 0.2 or greater.

[b] HCFC stands for hydrochloroflourocarbon. The Amendments state: "The initial list under this subsection [of the act] shall also include the isomers of the substances listed above. Pursuant to subsection (c), the [Environmental Protection Agency] Administrator shall add to the list of Class II substances any other substance that the Administrator finds is known or may reasonably be anticipated to cause or contribute to harmful effects on the stratospheric ozone layer."

References

COMDTINST M11000.11A, “Civil Engineering Manual.”

COMDTINST M4400.19A, “Supply Policy and Procedures Manual.” Chapter 4, Section J Requisitioning and Return of ODS.

COMDTNOTE 5090, “Certification of Technicians and Equipment.”

Pesticides and Pest Management

What Are They?

A pest is any organism (i.e., bird, insect, rodent, bacteria, weed) that adversely affects the well-beingwell being of personnel and animals; attacks real property, supplies, equipment, or vegetation; or is otherwise considered undesirable.

A pesticide is a substance or mixture of substances, including biological agents, that are used to prevent, destroy, repel, or mitigate pests. These include insecticides, anti-foulants, herbicides, fungicides, rodenticides, disinfectants, and plant growth regulators.

Pesticides are usually toxic chemicals that must be stored and handled with care. Depending on their properties and patterns of use, pesticides may leach through soils and contaminate ground water, especially where the water table is close to the surface, and/or soils are highly permeable. It is important to have a plan that considers these possibilities and outlines methods to prevent such problems from occurring.

Integrated Pest Management (IPM) is a comprehensive approach to the prevention, elimination, or control of pests. Proper pest management uses knowledge of the habitat and natural history of a pest; an understanding of the interrelationships between the pest population and the ecosystem; the selection of plantings, building materials or structural designs less prone to pest infestations or damage; and the use of the most appropriate physical, biological, cultural and chemical techniques. The IPM concept involves recognizing and accepting the fact that pest problems can be addressed in various ways and the only “best approach” is one that involves looking at all the options.

Current Regulations

The Environmental Protection Agency (EPA) regulates pesticides through its Office of Pesticide Programs (OPP). Two statutes are administered in this program:

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) of 1972 established the registration procedures for pesticide products; and

The Federal Food, Drug and Cosmetic Act (FFDCA) which governs pesticide residue levels in food or feed crops.

Under the FIFRA, EPA is responsible for registering new pesticides to ensure that, when used according to label directions, they will not present unreasonable risks to human health or the environment. EPA may classify a product for restricted use if its toxicity warrants special handling. Restricted pesticides may be used only by or under the supervision of certified applicators that are trained to handle toxic incidents of pesticide poisoning in residential as well as agricultural settings.

The Coast Guard’s Program

should…

- Budget for and employ adequate measures to control insects and other pests to: maintain health, morale, efficiency, and comfort of military as well as civilian personnel and military dependents on Coast Guard property; prevent loss of materials; eliminate deterioration of buildings and other structures; and avoid damage to grounds, forested areas, real property, and the environment;

- Ensure appropriate certification by all trained Coast Guard pesticide applicators and contractors;

- Ensure attendance at a recertification course every three years following initial certification by all certified personnel;

- Ensure compliance with applicable laws, regulations, ordinances, and instructions concerning pesticide application and storage;

- Ensure good sanitation practices by occupants of buildings, including those in government family housing, to discourage pest infestations;

- Cooperate with state and local government agencies concerned with pest management and coordinate with appropriate health care professionals whenever human health is an issue;

- Maintain operational data and cost records in sufficient detail to provide the necessary pest management information (including actual usage of pesticides);

- Notify your Maintenance and Logistics Command (k) through the normal chain of command of any "restricted use" pesticide prior to its application;

- Maintain a Unit Pesticide Control Log. The Pesticide Control Log is retained at the unit level. The log shall include all pest control operations on all Coast Guard owned and leased property. The log shall include information on control operations, i.e., target the pest control measures, site, and materials used;

- Dispose of waste pesticides through the unit's hazardous waste disposal procedures; and

- Use IPM whenever possible to reduce the use of pesticides. The application of pesticides should be perceived as the last measure after all non-chemical methods of pest control have been attempted.

References

COMDTINST M16465.11A, "Chemical Hazards Response Information System (CHRIS) Manual 1."

COMDTINST M16465.12A, "Chemical Hazards Response Information System (CHRIS) Volume II."

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M4610.5, "Transportation of Freight."

COMDTINST M16465.30, "Policy Guidance for Response to Hazardous Chemical Releases."

COMDTINST M5100.47, "Safety and Environmental Health Manual."

COMDTINST 10360.4A, "Volatile Organic Compounds (VOC) Regulations Governing Solvent Content in Paints, Coating, Solvents, and Cleaners."

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST M5090.3, "Natural Resources Management."

Pesticide regulations are contained in Title 40 CRF CFR Part 162. In addition, EPA has published some helpful guidance brochures that are available from your Federal Facility coordinator (phone numbers are in Appendix A this Guide). Of special interest are the following:

Pesticides Fact Book, A-107/86-003, June 1986.

Citizens Guide to Pesticides, September 1987.

Pollution Prevention and Hazardous Materials

What Are TheyIs It?

The Federal definition of Pollution Prevention (P2) is "any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering the waste stream or otherwise related to the environment (including emissions) prior to recycling, treatment, or disposal; and reduces the hazards to public health and the environment associated with the release of such substance, pollutants, or contaminants" (PPA, 42 USC 13102 (5)(A)). P2 is the Coast Guard's preferred method for ensuring compliance with all Federal, state, and local environmental laws, regulations, and requirements, and Federal agencies should set the example for P2 leadership.

Hazardous materials (HM) are defined under the U.S. Department of Transportation (DOT) regulations (Title 49 CFR Parts 100 through 199) as chemicals which are determined by the Secretary of Transportation to present risks to safety, health, and property during transportation. The DOT regulations include requirements for shipping papers, package marking, labeling, transport vehicle placarding, and training of personnel handling hazardous materials. Specific sections addressing shipment by rail, aircraft, vessel, and public highway are also contained in these Federal regulations.

Current Regulations

In the Pollution Prevention Act of 1990, Congress declared a national policy that pollution should be reduced or prevented at the source. The Pollution Prevention Act authorized the EPA to develop a national pollution prevention strategy which sets a waste management hierarchy. If pollution is not prevented, priority should first be given to recycling, then treatment, then proper disposal. Mandatory requirements have been established and include: biennial reporting for large quantity generators and treatment, storage, and disposal facilities; manifests for off-site transport; Toxic Release Inventory (TRI) reporting; stormwater pollution prevention plans; and CFC phaseout. Hazardous waste minimization is required by the Resource Conservation Recovery Act (RCRA). Under RCRA, units that generate 1,000 kilograms or more of hazardous waste per month must certify that a program is in place to minimize waste generation volumes and describe the specific steps taken to implement this program. Additionally, several states have passed, or are in the process of passing, legislation regulating pollution prevention, waste minimization, and recycling.

The Coast Guard's Program

Objectives…:

- Protect Coast Guard personnel and the environment;

- Develop and implement a Pollution Prevention (P2) Plan for facilities and cutters including an assessment of current business practices for P2 opportunities to control and reduce the amount of hazardous materials purchased and used;
- Includes hazardous materials reduction, or substitution, in the earliest stages of the planning or acquisition process for new equipment acquisitions;
- Eliminate the potential for pollution by reducing the quantity of hazardous waste generated through process modification, recycling, reuse, materials substitution, or elimination;
- Comply with all Federal, state, and DOT standards, instructions, and regulations related to hazardous materials;
- Encourage the consolidation of unit's hazmats into a single local or area program when mutually agreeable to the involved activities and oversight from area and local area coordinators is available; and

Commanding Officers should...

- Establish procedures to ensure that all hazardous materials used at shore facilities or on board cutters are properly and appropriately labeled;
- Maintain and distribute a manufacturer-supplied Material Safety Data Sheet (MSDS) for each hazardous material used at the unit;
- Establish a written comprehensive hazard communication program;
- Report all HMMS incidents that pose a risk to the environment or involve safety and health;.
- Develop and implement written plans and procedures for a Hazardous Materials Management System (HMMS) program (i.e. HAZMIN Center or HM Procurement Control);

- Appoint a Hazardous Materials Control Officer/Pollution Prevention Coordinator to oversee the unit’s HMMS program whether at a shore facility or aboard a cutter;
- Identify and resolve deficiencies in HMMS budgeting and allocation of resources;

- Ensure that hazardous materials are properly segregated, containerized and labeled prior to transfer from a cutter to a shore facility;

- Limit open market purchases of hazardous material to purchases for which a stock numbered product is unavailable. In cases where a standard stock item is deemed inferior, inform the Supply Officer so corrective action can be initiated;

- Establish, where appropriate, regional Memoranda of Understanding (MOU) or Inter-Service Support Agreements for mutual action on HMMS requirements with other Coast Guard, DOT, or Federal Agencies;

- Ensure that suspect materials and structures are tested for hazardous waste prior to demolition;

- Establish a P2 program and encourage all Coast Guard personnel to suggest and implement methods of pollution prevention or waste minimization;

- Procure and use non-hazardous and non-toxic materials when practicable;

- Establish an Affirmative Procurement Program for environmentally preferable products and recyclable materials and encourage recycling within your unit;

- Establish hazardous material and waste tracking and monitoring procedures to reduce waste generation;

- Use P2 strategies to reduce the amount and toxicity of all hazardous materials the Coast Guard uses and stores; and

- Measure the success of the Coast Guard's programs through the use of the Annual Pollution Prevention Scoring SystemReport (which replaces the P2S2).

References

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M16455.10, "Emergency Planning and Community Right-To-Know Act and Pollution Prevention."

COMDTNOTE 16455, "EPCRA/P2 Sample Program and Training Video.."

COMDTINST 16477.5 "Coast Guard Qualified Recycling Program (QRP) Policy."

COMDTINST 16477.5, Coast Guard Qualified Recycling Program.

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST M4500.5, "Property Management Manual."

COMDTINST M4200.19C, "Coast Guard Acquisition Procedures."

COMDTINST M4200.23, "Procurement Information Manual."

COMDTPUB P16480, "Emergency Planning, Preparedness, and Prevention Guide for Oil Spills and Hazardous Substances Releases"

ALDIST 112/95, "Universal Waste Rule."

OPNAVINST 5080.1

Pollution Prevention Act of 1990, 42 USC 13101.

Notice of the National Pollution Prevention Strategy, 56 Federal Register, pages 7849 - 7864, February 26, 1991.

Executive Order 12856, "Federal Compliance with Right-to-Know and Pollution Prevention Laws."

Environmental Protection Agency, "Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program", 58 *Federal Register*, May 28, 1993, pages 31114 – 31120.

Environmental Protection Agency, "Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans", EPA publication 832-R-92-006.

Office of the Federal Environmental Executive, "Greening the Government: A guide to implementing Executive Order 12873."

The hazardous materials regulations under DOT are contained in Title 49 CFR Parts 100 through 199.

Training requirements, which are vital to a proper hazardous waste/hazardous materials program, are outlined in Title 29 CFR 1910.120, and 40 CFR 262.34, 40 CFR 264.16, and 265.16.

29 CFR Parts 1910.101 - 1910.120, Hazardous Materials.

Polychlorinated Biphenyls (PCBs)

What Are They?

Polychlorinated Biphenyl (PCB) refers to any chemical substance that is composed of a biphenyl molecule which has been chlorinated to varying degrees, or any combination of substances which have such molecular structures. Human health effects from exposure to PCBs include skin rashes, alteration of liver enzymes, and symptoms of neurological disorders.

PCBs, they were used in a variety of applications primarily as a fire retardant. Known uses include dielectric fluids in electric transformers, electric ballasts for fluorescent lighting, and in electrical cable. Wool felt gasket material also often contain PCBs. Prior to 1980, PCBs were often added without being listed in material or equipment procurement specifications. Accordingly, the presence of PCBs cannot always be determined through review of applicable procurement documents. Note: unless there is clear documentation that equipment is free of PCBs, it must be assumed to that they are present. In the disposal of materials and components, care should be taken to identify all potentially hazardous substances and carry out the proper disposal.

Current Regulations

The Toxic Substances Control Act (TSCA) prohibits the manufacture, processing, and distribution in commerce of PCBs, except as exempted by the Environmental Protection Agency (EPA). TSCA also prescribes that use, marking, and disposal of PCBs shall be strictly regulated by the EPA. Regulations issued pursuant to TSCA require generator identification numbers and the manifesting of PCB wastes. Also, some state Resources, Conservation and Recovery Act (RCRA) programs, particularly in the area of disposal, place additional restrictions on the handling of PCBs.

Coast Guard policy allows existing intact non-liquid PCB items (such as rubber and plastic gaskets, electrical, cables, roofing, siding) are allowed to remain in use until the end of their useful life or replacement. These items shall be identified, marked, and reported to EPA in accordance with 40 CFR 761.40 and 761.45.

The Coast Guard's Program

Objectives…

- Systematically eliminate PCBs from all electrical distribution systems and related equipment located on Coast Guard property to the maximum extent possible in an environmentally safe manner.

Commanding Officers should…

- Transfer accountability and custody of PCBs and PCB items stored for disposal to Defense Reutilization and Marketing Office (DRMO), as possible;

- Handle, store, mark, and assess risks of PCBs and PCB items according to applicable Federal and state regulations;

- Ensure MLC investigates decommissioned or scheduled for decommission Cutters and boats for PCBs and remedy prior to their transfer or disposal;

- Annually, inventory or validate all PCBs and PCB items in accordance with procedures published by COMDTINST M16478.2 and as required by regulatory agencies;

- Report PCB spills or incidents involving combustion as prescribed in COMDTINST 16465.30, Policy Guidance for Response to Hazardous Chemical Releases, when the spill exceeds the reportable quantities established in Federal regulations;

- Register all PCB transformers and equipment with cognizant fire departments; and

- Prepare and update the activity PCB elimination plan and submit to your servicing Civil Engineering Unit (CEU), for review and approval.

References

COMDTINST M16478.2, "The Procurement, Handling, and Disposal of Polychlorinated Biphenyls (PCBs)."

COMDTINST M16465.11A, "Chemical Hazards Response Information System (CHRIS) Manual I."

COMDTINST M16465.12A, "Chemical Hazards Response Information System (CHRIS) Volume II."

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST M4610.5, "Transportation of Freight."

COMDTINST M16465.30, "Policy Guidance for Response to Hazardous Chemical Releases."

COMDTINST M5100.47, "Safety and Environmental Health Manual."

Federal Regulations pertaining to PCBs are contained in Title 40 CFR Part 761.

Public Relations

What is it?

Public relations is often thought of as a means of expressing the Coast Guard's opinions to the public. However, as Commanding Officer, you must allow for public involvement and two-way communications when working with the public on environmental issues. Public Involvement is a planned effort to involve citizens in the decision-making process and to prevent or resolve citizen conflict through mutual two-way communication. Public involvement is as an integral part of any facility environmental program. Poor public involvement can lead to negative news coverage, Congressional interest, and adverse public reaction. A progressive and successful public involvement program prevents delays and assists in completing, rather than deterring, the project.

Current Regulations

Many environmental laws provides for some type of public involvement. Some requirements are more extensive than others. Public review and comment on plans is required for many actions including permits for water discharge and waste storage and disposal, discharge of fill into wetlands and waters of the U.S., dredging, and major project planning activities. In addition, public notification may be required in the event of an environmental accident, i.e. release or spill of a hazardous substance.

The Coast Guard's Program

Because public involvement requires that the USCG speak with one voice, these activities should be managed by the cognizant Public Affairs Officer (PAO), in close coordination with other members of your staff. If you command a unit operating in an environmentally sensitive area or a unit that deals with substances and materials that could be environmentally hazardous, an environmental public relations plan should be developed now so that when if an event occurs, you can be in a "proactive" rather than a "reactive". The PAO can assist you with identifying and preparing plans to meet public involvement requirements associated with environmental programs.

Commanding Officers should...

- Understand that planning and implementation of the plans requires command involvement;
- Understand the difference between public relations and public involvement;
- Understand that the average citizen may distrust the Government's representation of controversial issues, so openness and honesty from the beginning are crucial;
- Do not take criticism personally;

- Establish a contact (preferably in the PAO) and make him/her an expert;
- Go on the offensive - release the information from the beginning of a project or issue;
- Understand that you're striving for objective, accurate, but not necessarily positive, news coverage;
- Never selectively release information;
- Never knowingly make any false statements;
- Be prepared by maintaining current fact sheets and questions/answers;
- Don't be afraid to say "I don't know," and be prepared to research answers;
- Offer briefings, site visits, or facility tours.

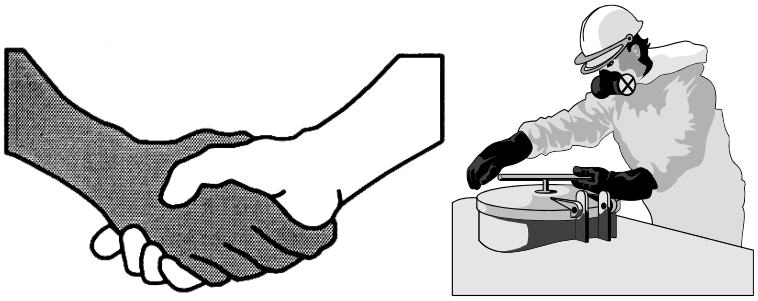
Many citizens will first turn to their elected officials when they have a complaint or concern about the community. Typically, these contacts serve to point out a need for more information and a mechanism for two-way communication. The two best methods for managing environmental issues with elected officials are:

- Plan and implement a progressive public involvement program that provides citizens with information they may otherwise seek from elected representatives, who will then seek it from you; and
- Provide in the plan methods for keeping elected officials informed of the overall environmental program, and particularly of proposed actions or operations that may have environmental consequences. Such methods may include:
  - ⇒ Sending fact sheets or news releases regularly about facility environmental activities;
  - ⇒ Providing a contact person at the facility to expedite answers to questions they receive from constituents;
  - ⇒ Providing tours/briefing on environmental programs so that the public will better understand the issues; and
  - ⇒ Being personally involved in the communication process. Elected officials appreciate personal attention from the Commanding Officer. Face-to-face communication with elected officials increases credibility and cements working relationships.

Public Relations During An Environmental Emergency

An important component of responding to environmental emergencies is public relations. Active involvement of your cognizant public affairs office is essential to ensure that adequate and accurate information is provided to the general public, new organizations, and elected officials. Public relation plans should be developed well in advance to avoid inappropriate reaction in emergency situations.

- Be prepared for emergency situations - prepare a public involvement plan that you can activate when an emergency occurs;
- Designate the PAO as a point of contact for the media and public officials and keep the PAO informed so that they can provide the public with accurate up-to-date information; and,
- Demonstrate during emergency situations that you are on top of the situation and you are doing all you can.



Radon

What Is It?

Radon, an invisible, odorless radioactive gaseous form of uranium. Its short-lived decay products are produced by the natural disintegration of the element uranium that occurs in air, water, rocks, soil, or other media. An increased risk of lung cancer is the only known health effect associated with exposures to elevated radon levels. Radon does not cause any short-term health effects, such as shortness of breath, coughing, headaches, or fever. Elevated indoor radon levels have been found in all areas of the U.S.

Current Regulations

The Indoor Radon Abatement Section of the Toxic Substance and Control Act (TSCA) requires Federal departments to conduct studies of radon levels in Federal buildings, and to provide results to the Environmental Protection Agency (EPA). The EPA will then provide a consolidated report on radon levels in Federal buildings to Congress. Congress, upon review of the Federal buildings radon report, may pass additional requirements for Federal departments as part of a comprehensive radon abatement program.

The Coast Guard's Program

Objectives…

- Ensure radon detectors are properly installed in housing units and occupied structures where necessary; and
- Based on EPA's scheduling guidelines, all structures with radon levels over four picocuries per liter (pCi/L) shall be mitigated.

Commanding Officers should…

- Identify, evaluate, and manage radon in Coast Guard owned housing and child development centers;
- Implement appropriate radon mitigation actions for structures with radon levels over 4 pCi/L; and
- Request assistance from your servicing Civil Engineering Unit (CEU), Maintenance and Logistics Command (MLC), or the Environmental Management Division (G-SEC) (for Headquarters' units) to implement appropriate radon mitigation actions for structures with radon levels over 4 pCi/L.

References

COMDTINST M5100.47, "Safety and Environmental Health Manual."

COMDTINST 6260.1, "Asbestos, Lead, and Radon in Coast Guard Housing."

Indoor Radon Abatement Act, 1988.

A Citizens Guide to Radon: The Guide to Protecting Yourself and Your Family from Radon, (Second Edition), EPA 402-K92-001, May 1992.

Radon Reduction Guide: A Homeowners Guide, EPA #OPA-86-005.

Home Buyers and Sellers Guide to Radon, EPA 402-R-93-003, March 1993.

Radon Mitigation Standards, EPA 402-R-93-078, October 1993.

Durability of Performance of a Home Radon Reduction System—Sub-Slab Depressurization System, EPA/625/6-91/032, April 1991.

Technical Support Document for the 1992 Citizen's Guide to Radon, EPA 400-R-92-01, May 1992.

Radon Reduction Techniques for Detached Houses, EPA/625/019.

Reportable Releases

What Are They?

This section deals with reporting requirements for releases of oil or hazardous substances. A discharge, as defined by the Clean Water Act (CWA), includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil or listed hazardous substance into navigable waters of the U.S. and adjoining shorelines. A release, as defined by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injection, escaping, leaching, dumping, or disposing into the environment of a hazardous substance.

Various laws, as described below, have release reporting requirements. Releases that trigger these reporting requirements include:

- Release causing injuries to persons;
- Release causing damage to property;
- Release outside the facility;
- Release that does or may reach surface water;
- Release from above or underground storage tank (UST);
- Release requiring emergency response team;
- Release of reportable quantity or more;
- Release of 1 lb. of an extremely hazardous substance; or
- Release during hazardous material transport.

Current Regulations

The CWA prohibits the discharge of oil or listed hazardous substances into navigable waters of the U.S. and adjoining shorelines and establishes reporting requirements for releases. Superfund/CERCLA requires reporting of releases of any hazardous substance (HS) identified under CERCLA § 101(14) into any environmental medium. Section 304 of EPCRA requires that the release of reportable quantities (RQ) of any extremely hazardous substance (EHS) listed under EPCRA Section 302 or CERCLA must be reported. The Resource Conservation and Recovery Act (RCRA) requires facilities to report releases of hazardous waste (HW).

In addition, most state regulatory programs require notification of state and local authorities of oil and hazardous substance (OHS) spills.

Under international agreements, oil and hazardous substance spills that impact, or have the potential to impact, a foreign shoreline must immediately be reported to the nearest affected nation. Spills that impact or have the potential to impact shorelines of Canada or Mexico fall within the scope of U.S./Canada and U.S./Mexico bilateral agreements and must be reported immediately to the NRC. Additionally, oil and hazardous substance spills in Puerto Rico, the Panama Canal Zone, and the U.S. Virgin Islands must be reported to the NRC.

The Clean Water Act

What quantity of spill must be reported?	Oil spills must be reported when the amount of oil discharged results in one of three conditions: 1. A violation of applicable water quality standards 2. A film or sheen upon, or discoloration of, the surface of the water or adjoining shorelines 3. A sludge or emulsion deposited beneath the surface of the water or upon adjoining shorelines
Who must report spills?	Any person in charge of a cutter or facility shall, as soon as he has knowledge of a discharge of oil or a hazardous substance in reportable quantity, report it.
When and where must notification be made?	Immediate notice must be given to the National Response Center (800-424-8802) per Unit's spill contingency plan.
Exemptions	Discharge in compliance with effluent limitations established in an NPDES permit; Discharges identified and made a part of the public record for an NPDES permit, and subject to a condition in the permit (e.g. tank ruptures in response to which the permit requires certain response actions; or Continuous or anticipated intermittent discharges identified in a permit or permit application (e.g. upsets and treatment system failures not subject to permit conditions).

Superfund/CERCLA

When is reporting required?	Reportable quantities (RQs) of 1, 10, 100, 1,000, and 5,000 lbs. have been established based on the potential for harm from the release of the hazardous substance (HS). HSs are defined under Sections 307 and 311 of the Clean Water Act, Section 112 of the Clean Air Act, and Section 7 of the TSCA.
Who must report spills?	Any person in charge of a cutter or facility has 24-hours to determine if a reportable quantity of a release has occurred and to report it.
When and where must notification be made?	The National Response Center (800-424-8802) must be notified within 24 hour of a discharge of an HS in a reportable quantity.
Exemptions	Federally permitted releases; Continuous releases that are stable in quantity and release (these releases must be reported annually); or Releases within an enclosed structure that do not reach the environment.

RCRA

When and where is reporting required?	If the release of RCRA hazardous waste could threaten health or the environment outside the facility, the National Response Center (800-424-8802) must be notified immediately. When a release requires implementing the facility's contingency plan, it must be reported in writing to the EPA Regional Office within 15 days. Releases of RCRA hazardous waster during transportation, the National Response Center (800-424-8802) must be notified immediately. A report in writing to the Department of Transportation must be made within 154 days of the release of <u>any</u> quantity of hazardous waste. [These reporting requirements apply to a broader list of hazardous materials under the Hazardous Materials Transportation Act (49 CFR 171)].
Contingencies	Generators and transporters who do not have an EPA identification number, and who discharge or produce hazardous waste in an emergency situation that requires immediate transportation of waste, may telephone the EPA Regional Office for a provisional identification number. If a discharge of hazardous waste occurs during transportation and requires immediate removal, a Federal, State, or local government official may waive the identification number and manifest requirements for the transportation of the waste off-site.

EPCRA

When is reporting required?	Reporting is required when there is a release of a reportable quantity of an extremely hazardous substance (EHS) (40 CFR 355) or a reportable quantity of a hazardous substance (as defined in CERCLA – see previous table). If a reportable quantity of a covered substance is released within a 24-hour period, it must be reported. Only the hazardous portion of mixtures or solutions need to be considered.
Who must report spills?	Any person in charge of a cutter or facility shall immediately report the release of an EHS or HS.
When and where must notification be made?	The following information must immediately be given to the Local Emergency Planning Committee (LEPC) and the State Emergency Response Commission (SERC): • Chemical name of substance released; • Quantity released; • Whether it is an extremely hazardous substance; • Time and duration of release; • Medium or media into which the release occurred (e.g. surface water, ambient air); • Health risks posed by the release and, where appropriate, medical advise for exposed persons; • Safety precautions; and • Name and number of facility contact person. A written follow-up report must be submitted "as soon as practicable" after the release. This "follow-up emergency notice" must: • Reiterate and update information provided in the oral notice; • Describe actions taken to respond to and contain the release; • Identify any known or anticipated health risks associated with the release; and • Where appropriate, give medical advice for exposed individuals
Exemptions	Federally permitted releases; or Continuous releases that are "stable in quantity and rate" and do not include "statistically significant increases."

The Coast Guard's Program

Objectives…

Prepare for oil and hazardous substance pollution incidents and where such incidents occur, take immediate, direct action to minimize the harmful effects on the environment.

Commanding Officers should…

- Report oil and hazardous substance pollution incidents in U.S. waters immediately and directly to the National Response Center (NRC). If the NRC can not be reached by phone immediately, then the spiller/spill discoverer is required to immediately notify the closest EPA office (for inland spills) or the appropriate Marine Safety Office (for coastal releases).

- Report releases of reportable quantities of hazardous substances to the State Emergency Response Commission (SERC) and Local Emergency Planning Committee (LEPC). Releases that result in exposure to personnel solely within the boundaries of a shore facility do not require notification to the SERC or LEPC, regardless of whether the reportable quantity for that substance was exceeded.

- Report oil and hazardous substance spills occurring within state waters, or with the potential to impact the U.S. shoreline, to applicable state environmental authorities by voice where required by state statute.

- Report oil and hazardous substance spills that impact, or have the potential to impact, a foreign shoreline to the nearest affected nation. Spills that impact or have the potential to impact shorelines of Canada or Mexico fall within the scope of U.S./Canada and U.S./Mexico bilateral agreements and must be reported immediately to the NRC. Additionally, oil and hazardous substance spills in Puerto Rico, the Panama Canal Zone, and the U.S. Virgin Islands must be reported to the NRC.

- In port, cutter commanding officers shall notify the shore facility commanding officer by the most expeditious means, notify the National Response Center by telephone, and take immediate actions, to the extent possible, to mitigate the effects of the spill; and

- Actively involve your public affairs support organization to ensure that adequate and accurate information is provided to the general public, new organizations, and elected officials. Public awareness plans should be developed proactively to avoid inappropriate reaction in emergency situations. (see "Emergency Planning and Community Right-to-Know" and "Public Relations").

References

COMDTINST M16600 (series), "Marine Safety Manual."

COMDTINST 16451.5A, "Policy Guidance for Intervention in Ship-Related Marine Pollution Incidents on the High Seas and on the Navigable Waters of the U.S.," February 1, 1988.

COMDTINST 16450.32A, "Guidelines for the Implementation and Enforcement of Vessel Response Plans, Facility Response Plans, and Shipboard Oil Pollution Emergency Plans."

COMDTNOTE 16478, "Facility Response Plans."

COMDTPUB P16480, "Emergency Planning, Preparedness, and Prevention Guide for Oil Spills and Hazardous Substances Releases."

Oil Pollution Act of 1990 (33 U.S.C. 40).

Occupational Safety and Health Act (29 U.S.C. 15).

29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response."

33 CRF Parts 151.51, 154 Subpart F, 156, and 40 CFR Parts 220-225 and 227-229 contain Ocean Dumping Regulations and Criteria.

40 CFR 112, "Oil Pollution Prevention."

33 U.S.C. 1901. "Act to Prevent Pollution from Ships (APPS)."

Sewage - Section 312 of the FWPCA (33 U.S.C. 1322).

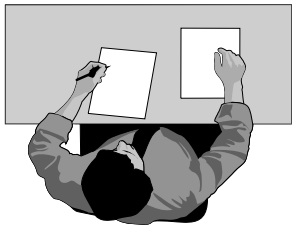
Noxious Liquid Substance - Refer to guidelines in "Ship's Procedures" and "Arrangements Manual" for detailed restrictions.

Hazardous Substances and Reportable Quantities listed in 40 CFR 117.

Annex II MARPOL.

Reporting and Record Keeping Requirements

What Are They?



Your unit is required to keep records of the aspects of activities that have the potential to affect the environment. You are also required to report on your activities to state and Federal regulators on a regular basis. An important aspect of your unit's environmental program is ensuring that you meet the numerous regulatory and Coast Guard reporting requirements.

Current Regulations

Most of the major pollution control statutes provide the Environmental Protection Agency (EPA) with broad authority to obtain information from regulated entities, including Coast Guard facilities. In some cases, the statutes themselves require regulated entities to collect specified information and report to EPA. These statutes also authorize EPA to require facilities and cutters to compile, store, and report data to verify compliance. These provisions call for a variety of different reporting, record keeping, and self-monitoring schemes. The statutes also authorize EPA, state, and local authorities to enter Federal facilities to collect information and review records. The number and frequency of regulatory reports varies depending on the program area (e.g., hazardous substance spills must be reported immediately to the National Response Center when they exceed certain quantities, while other reports such as PCB Inventories are prepared annually). Reporting requirements also differ from state to state.

The resulting legal requirements can be placed into six broad categories described below. The tables on the following pages provide an overview of your unit's reporting and record keeping responsibilities.

1. Periodic performance reporting. Examples include: National Pollutant Discharge Elimination System Discharge Monitoring Reports; Excess Emission Reports; Annual PCB Inventory; Biennial Report to EPA (required for all facilities that are classified as Large Quantity Generators (LQG) of hazardous waste); and, Toxic Reductions Inventory.

2. Record keeping. Examples include: permits, monitoring records, inspection logs, and disposal reports.

3. Notification and reports of problems. Examples include: i.e. release of a hazardous substance or pollutant in an reportable quantity (includes ATON batteries), upsets, bypasses, spills (see "Reportable Releases")..

4. Reports of information needed for non-enforcement regulatory matters in response to specific orders from EPA.

5. Reports of compliance or other pollution data in response to specific orders.

6. Non-emergency notification requirements.

The list demonstrates EPA's (and delegated or authorized states') broad authorities to require reporting and record keeping. It also emphasizes the need for Federal facilities to keep track of their own compliance status using any required method they deem reasonable (such as the Coast Guard's Environmental Compliance Evaluation (ECE) program), to provide themselves with information to meet such requirements. Self-reporting and record keeping are important to EPA's compliance monitoring efforts. , EPA places high priority upon enforcement actions, including criminal prosecution, in cases of deliberate distortion and/or falsification of self-monitoring data.

The Coast Guard's Program

Commanding Officers should...

- Keep all records and reports at the unit for three years. (Records of all required air quality monitoring data and supporting information must be retained for a period of five years from the date of the monitoring sample.) However, due to the significant liability connected with disposal of hazardous wastes, all hazardous waste management records shall be retained at the "generating unit," pending further notice. A request has been submitted to the National Archives to make these records permanent; and

- As of the date of this COMDTPUB, all Coast Guard records are currently on a freeze and may not be destroyed pending further notice.

- Ensure that all records outlined in the following tables are completed as required.

References

COMDTINST M16478.1 series, "Hazardous Waste Management Manual."

COMDTINST M5090.9, "Storage Tank Management Manual."

COMDTINST M5212.12, "Paperwork Management Manual"

COMDTINST M16455.10 series, "Emergency Planning and Community Right-to-Know and Pollution Prevention."

42 CFR 766, Air Quality Reporting Requirements.

42 CFR 122.41 and 40 CFR 403.12, Waste Water Record Keeping and Reporting Requirements.

40 CFR 280, Underground Storage Tank Registration and Reporting Requirements.

EPCRA Reporting Requirements

Who Must Report?	Per Executive Order 12856, all Federal facilities which meet one or more of the threshold reporting requirement of EPCRA, including: • EPCRA Section 302: Any Extremely Hazardous Substance (EHS) at or above its Threshold Planning Quantity (TPQ) (40 CRF CFR 355.20) (see "Rreportable Releases"). • EPCRA Sections 311 & 312: Hhazardous Chemicals at or above 10,000 pounds and EHSs at or above 500 pounds or TPQ, whichever is less (40 CFR 370.20, 370.21, 370.40). • EPCRA Section 313: 25,000 lbs/yr manufacturing and/or importing, 25,000 lbs/yr processing, or 10,000 lbs/yr otherwise using one or more listed toxic chemicals (40 CFR 372.25). As directed by Section 3-304(b) of EO 12856, EPCRA Section 313 applies regardless of Standard Industrial Classification (SIC) Code.
Reporting Requirements	Reports must be submitted to EPA and the designated state or local agency by July 1 each year for activities that took place during the preceding year. Reporting includes: • What chemicals were stored or released into the local environment during the preceding year. • How much of each chemical went into the air, water, and land in a particular year. • How much of the chemicals were transported away from the reporting facility for disposal, treatment, recycling, or energy recovery. • How chemical wastes were treated at the reporting facility. • The efficiency of waste treatment. • Pollution prevention and chemical recycling activities.

Air Quality Reporting Requirements (in accordance with 42 CFR 766)

Monitoring	Air quality permits are required to incorporate all applicable record keeping requirements and report on the following: date, place as defined in the permit, and time of sampling or measurements, date analyses were performed, company or entity that performed the analyses, analytical techniques or methods used, results of the analyses, and operating conditions as existing at the time of sampling or measurement.
Reporting	For all monitoring required, reports must be submitted every six months. All instances of deviations from permit requirements have to be clearly identified in the reports and certified by a responsible official. Deviations from permit requirements, including those attributable to upset conditions, are required to be reported promptly. The report shall include the probable cause of the deviations and any corrective actions or preventative measures taken.

Waste Water Record Keeping and Reporting Requirements (in accordance with 42 CRF CFR 122.41and 40 CFR 403.12)

NPDES Permits	Facilities with NPDES permits are required to monitor their discharges. Monitoring results are recorded on discharge monitoring reports (DMRs). Most NPDES authorizedNPDES authorized states use their own DMR form that has been adapted from the Federal DMR. Specific monitoring and record keeping requirements are outlined in the facilities NPDES permit.
Pretreatment Regulations	Industrial facilities that discharge directly into publicly owned treatment works (POTWs) are required to maintain records of their discharges including: a base line report containing permit information, pollutant measurements, and sampling records. The baseline report must be submitted within 180 days of EPA's promulgation of a new pretreatment standard, or determination that a POTW user will be included in a specific category of discharger. New regulated sources must file this report within 90 days from initial discharge. New source reports do not need certification or a compliance schedule.

Underground Storage Tank Registration and Reporting Requirements (in accordance with COMDTINST M5090.9 and 40 CFR 280)

Reporting Requirements - The following UST reports submitted shall be routed through the cognizant CEU unless otherwise directed by MLC guidance.	
Notification of UST systems	Certification of new UST systems, reasonable ground inspections and title or other document searches for the presence of any tank that may have been taken out of service since 1974.
Releases including suspected releases, spills and overfills, and confirmed releases	Spill or overfill of 25 gallons or more of oil, you must notify your servicing CEU and the appropriate state agency contact. If the oil spill or overfill causes a sheen on nearby surface water you shall also contact the National Response Center at 800-424-8802. MLC(s) and Commandant (G-SEC) should be notified by CEU of any reports of leaking tanks. Note: some states have lower thresholds for reporting.
Corrective actions planned or taken	Initial abatement measures, initial site characterization, free product removal, investigation of soil and ground-water cleanup, and corrective action plans should be filed with your servicing CEU and the appropriate state agency.
Notification prior to permanent closure or change in service	Notification should be made to your servicing CEU and the appropriate state agency.
Record Keeping Requirements - the following records must be maintained at the unit, and, upon request, made available to the responsible agency (EPA or authorized state) at any reasonable time.	
Documentation of operation of corrosion protection equipment	
Documentation of UST system repairs	
Recent compliance with release detection requirements	
Results of the site investigations conducted at permanent closure	
Post-notification of UST to regulators (for removal from state databases)	

Hazardous Waste Record Keeping and Reporting Requirements (in accordance with COMDINST M16478.1B and 40 CFR)

Manifest Documents - must be retained permanently at the "generating unit"	SQGs and LQGs Generators must complete EPA Form 8700 for all hazardous waste shipped off site. The generator must retain one copy and ensure receipt of the original copy once signed by the TSDF. The remaining copies are to be given to the transporter. CESQGs complete Form 1149.
Exception Reports – must be retained permanently at the "generating unit"	Generators who do not receive a copy of the signed manifest from the owner or operator of the designated TSDF within 35 days of the date of the shipment must contact the transporter and/or the owner or operator of the designated TSDF to determine the status of theof the hazardous waste - note: limits vary from state to state. This action (phone call) should be recorded in an appropriate log. If a copy of the signed manifest from the owner or operator of the designated TSDF is not received by a LQG within 45 days of the date of the shipment (60 days for SQGs), an Exception Report must be submitted to the unit's servicing CEU and the EPA Regional Administrator- note: limits vary from state to state.
Test Results/Waste Analysis	All generators (including Conditionally Exempt SQGs) must keep results of test and analysis used to determine whether or not wastes are hazardous.
Commercial Reclamation/ Recycling Agreements for Solvents (such as Safety-Kleen)	SQGs do not need to manifest exchange of old and new solvents; nor do they include the amount in the monthly generation total. A copy of the reclamation agreement must be retained for a period of at least three years after expiration of the agreement. LQGs must comply with the normal manifest requirements when recycling solvents or other hazardous waste.
Extension of Permissible Storage Time	An extension may be granted at the discretion of the EPA Regional Administrator (or appropriate state official) on a case-by-case basis. Extension must be requested by letter and copies of any extension requests should be retained along with other HW records.
Biennial Reports - EPA Form 8700-13A/B	LQGs who ship hazardous waste off-site must prepare and submit forms to the State or Regional Office by March 1 of each even numbered year in accordance with 40 CFR 262.41. Requirements for state reporting vary.
Inspection Logs	Generators must maintain a written log which records the findings of weekly container inspections.
Training Records	Records documenting the training of all personnel handling or managing hazardous waste need to be maintained by generators in accordance with COMDINST M 16478.1B.
Exceptions to Reporting	On-Scene Coordinators for spill cleanups who possess a Generator I.D. number are not subject to the biennial reporting requirements.

Solid Waste Management

What Is It?

Non-hazardous solid waste, as defined and regulated under the Resource, Conservation and Recovery Act (RCRA), consists of many diverse types of wastes including municipal solid waste, some municipal sewage sludge, industrial and commercial "non-hazardous" waste, as well as some semi-solid and liquid wastes. Solid waste also consists of such special wastes as infectious waste, construction waste, household waste, and oil and gas waste.

Environmental Protection Agency (EPA) studies have revealed that more than 11 billion tons of solid waste are generated each year in the U.S. Presently, there are approximately 227,000 disposal units receiving solid waste. These facilities include surface impoundments, municipal sewage sludge and application units, and landfills. Landfilling and incineration are currently the most common method of solid waste disposal. This is because landfills have historically been the least expensive way to dispose of municipal solid waste. However, landfill closures and more stringent solid waste disposal regulation proposed by the EPA and local jurisdictions will increase the cost of solid waste disposal, creating a greater incentive for alternative management techniques, such as source reduction, recycling, and incineration.

Current Regulations

Non-hazardous solid waste is managed in accordance with Subtitle D of RCRA. Regulation of landfills, contained in 40 CFR 240-259, establish facility location restrictions, design and operating criteria, requirements for ground water monitoring, and closure and post-closure care requirements for municipal landfills.

MARPOL Annex V and the U.S. "Act to Prevent Pollution from Ships" of 1980 regulate the disposal of ship generated solid waste. The discharge of plastics into any water is prohibited. Special areas where no solid waste may be discharged include: the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the Persian Gulf area, the North Sea, the wider Caribbean, and Antarctica. Solid wastes that are strictly prohibited include: plastic and plastic items, packing material, paper, rags, glass, and crockery.

Currently, state and local governments have the basic responsibility for promulgating regulations related to the management of Subtitle D wastes. For instance, many states require permits for solid waste landfills. These governments are encouraged to promote increased use of product separation, source reduction, and recycling to reduce the volume of solid waste requiring disposal through Subtitle D, and it is your responsibility as Commanding Officer to take the necessary actions to comply.

The Coast Guard's Program

Objectives…

- Examine the recycling potential for scrap metal, high-grade paper, plastics, corrugated containers and aluminum cans;
- Implement solid waste recycling and source reduction programs, where applicable, to keep pace with local and national efforts to maximize recycling and recovery of materials from solid waste;
- Identify economically recyclable wastes and markets for these wastes in accordance with the Coast Guard's Qualified Recycling Program (QRP);
- Ensure an adequate solid waste disposal capability for all Coast Guard activities;
- Minimize the use of packaging materials in the Coast Guard Supply System;
- Recycle and reuse oil whenever technically and economically feasible and when environmentally acceptable; and
- Establish an Affirmative Procurement Program for recyclable materials.

Commanding Officers should…

- Develop solid waste management plans including source reduction, recycling programs, QRP, and resource recovery facilities as required;

- If in a tenant status, cooperate with the activity or lessor which provides solid waste collection and disposal services in the establishment of source reduction and separation programs;
- If your unit is located in a Standard Metropolitan Statistical Area (SMSA), cooperate with the designated SMSA lead agency;
- Maintain records on annual solid waste management generation, types and amounts recycled, and QRP costs and proceeds; and

- Ensure solid waste generated by cutters is disposed of in accordance with Coast Guard policies.

References

COMDTINST M164787.1B, "Hazardous Waste Management Manual."

COMDTINST 16477.5, "Coast Guard Qualified Recycling Program (QRP) Policy."

COMDTINST M11000.1A, "Civil Engineering Manual."

COMDTINST M4500.5, "Property Management Manual."

COMDTINST M4200.19C, "Coast Guard Acquisition Procedures."

COMDTINST M4200.23, "Procurement Information Manual."

OPNAVINST 5080.1

40 CFR 151.51, "Garbage Pollution."

40 CFR 240-257, "Solid Waste Management Regulations."

Executive Order 12780, "Federal Agency Recycling and the Council on Federal Recycling and Procurement Policy."

Executive Order 12856, "Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements."

Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention."

Federal Solid Waste Management Regulations are provided in Title 40 CFR Parts 240-259.

Storage Tank Management

What Are They?

Underground and above-groundaboveground storage tanks have been widely used throughout the nation over the past 40 years to store petroleum products, chemicals and wastes. Most of these tanks contain petroleum products (gasoline or oil).

Leaking underground storage tanks (USTs) and the resulting soil, surface water, and ground water contamination are a national problem. The Environmental Protection Agency (EPA) has estimated that there are 1.8 million USTs nationwide, and as many as 20 percent may be leaking. Leaks or spills can also occur with Aboveground Storage Tanks (ASTs).

The nation draws about half of its drinking water from ground water sources. Leaking storage tanks have contaminated many drinking water sources around the country. Cleanup from a leaking UST can cost $100,000 or more, and can become even more expensive if an aquifer becomes contaminated.

Tanks do not have to be totally underground to be considered an UST. Generally, regulated USTs are those which have 10 percent or more of their volume underground (including the piping) exceeding 1,100 gallons capacity.

Current Regulations

In 1984, Congress amended the Resource Conservation and Recovery Act (RCRA) to add Subtitle I which established a comprehensive regulatory program for ASTs and USTs containing "regulated substances." The EPA regulates this program under Title 40 CFR Part 280. In addition, many states have promulgated storage tank regulations. The Coast Guard is obligated to comply with these state regulations as well as the Federal requirements.

Specific requirements vary somewhat depending on the contents of tanks. Generally, tanks installed after December 1988 must meet standards for corrosion protection, spill and overflow protection, installation, and leak detection. Tanks installed prior to December 1988 must be retrofitted to meet two major requirements: corrosion protection and leak detection.

The Clean Water Act (CWA) prohibits pollution discharges into national waterways, unless exempted by statue or authorized by permit. As "on-shore facilities,", ASTs are covered under the CWA. EPA requires owners/operators of ASTs and USTs to develop and implement a Spill Prevention, Control and Countermeasures (SPCC) Plan. This requirement covers all facilities with AST oil capacities of more than 660 gallons in a single container, a total oil capacity of more than 1,320 gallons, or an underground oil capacity of more than 42,000.

The Coast Guard's Program

Objectives…

- Maintain compliance at all times;
- Test all existing USTs for leakage; and
- Close all abandoned USTs, preferably through removal.

Commanding Officers should…

- Ensure that notification forms are completed for USTsstorage tanks and forward the notification to the appropriate state agency;
- Assure that all operational USTs are appropriately permitted in accordance with state laws;
- Copy all notification forms to your servicing engineering unit;.
- Prepare UST Management Plans, with assistance from your servicing Civil Engineering Unit (CEU), Maintenance and Logistics Command (MLC), or the Environmental Management Division (G-SEC) (for Headquarters' units) in order to achieve and maintain compliance with all applicable Federal, state, and local laws;.
- Implement a Spill Prevention Control and Countermeasures (SPCC) Plan. Such a plan is required at any facility that stores more than 660 gallons of petroleum products in a single aboveground tank; more than 1,320 gallons in total capacity in all aboveground storage tanks; or more than 42,000 gallons underground storage capacity and is located near waters of the U.S.;
- Accomplish leak detection and product inventory requirements, record keeping, and operation of monitoring systems required by Federal, state, and local storage tanks laws and regulations;
- Replace or repair storage tanks as required by applicable Federal, state, and local laws and regulations; and
- Comply with applicable Federal, state, and local laws and regulations concerning the construction, removal, or abandonment of storage tank systems.

References

COMDTINST M5090.9, "Storage Tank Management Manual."

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTINST M11000.1A, "Civil Engineering Manual."

COMDTINST 6260.21A, "Hazard Communication for Workplace Materials."

COMDTINST 6260.22, "Implementation of the Benzene Occupational Exposure Standard."

COMDTINST M16465.30, "Policy Guidance for Response to Hazardous Chemical Releases."

COMDTINST M5100.47, "Safety and Environmental Health Manual."

40 CFR 112, "Oil Pollution Prevention."

MUSTS for USTs - A User's Guide to Regulations for Underground Storage Tank Systems, EPA Office of Underground Storage Tanks, July 1990, EPA/530/UST-88/008.

Federal UST regulations are addressed in Title 40 CFR Parts 264-265 (TSDF Standards) and in Part 280 (Underground Storage Tanks).

"Don't Wait Until 1998 - Spill, Overfill, and Corrosion Protection for Underground Storage Tanks." EPA Publication EPA 510-B-94-002

Training and Education

Why is it important?

A comprehensive approach to environmental training and education is necessary to support the Coast Guard's objective of ensuring that environmental protection is inherent in every mission and at every command level. All Coast Guard personnel need to be aware of the environmental aspects, impacts, and liabilities of activities they perform and operational decisions they make.

Effective environmental training and education will enhance the compliance status of Coast Guard operations and promote environmental stewardship during operations for maritime support and activities. All levels of personnel need to know how to perform their duties in compliance with regulations and policy. Managers and supervisors should be able to recognize significant areas of non-compliance with established regulations and Coast Guard policy.

To ensure environmental issues are considered for all Coast Guard activities, managers and supervisors need to receive environmental awareness training that specifically addresses their units' environmental requirements. This awareness training should emphasize how operational decisions can influence their unit's environmental compliance status. Operational decisions should also consider how the command can effectively provide and support environmental training opportunities for employees in those operations with potential environmental impact and/or liability.

Current Regulations

Coast Guard policies and environmental regulations requiring that specific training subjects be provided to personnel at Coast Guard units include:

- Coast Guard policy (COMDTINST 16478.1B) requires training for all personnel who work with hazardous waste. These personnel may be employed at units with either Large Quantity Generator (LQG) and Small Quantity Generator (SQG) status. RCRA requires initial training and an annual refresher course for these hazardous waste personnel. These courses are currently offered through the Maintenance Logistics Commands (MLCs).

- The Hazardous Waste Operations and Emergency Response Act (HAZWOPER), mandated by the Occupational Safety and Health Administration (OSHA), and Coast Guard policy (COMDTINST 16478.1B) require extensive, specific training for workers involved in hazardous waste cleanup operations and selected emergency response activities. There are six different levels of training listed in the HAZWOPER regulations; check with your CEU to determine which training may be required for your personnel.

- The Hazardous Materials Transportation Act (HMTA), mandated by the Department of Transportation (DOT), requires triennial training for all employees who load, unload, handle, prepare, or transport hazardous materials and wastes. Coast Guard personnel who generate hazardous waste receive function-specific, HMTA training through the RCRA courses listed above. Other positions should receive HMTA training in accordance with their specific job duties and applicable regulatory requirements. Storekeepers should contact G-SLP (Transportation Officer) for hazardous materials training. Loadmaster and specialized air cargo training is required for some hazardous materials handlers.

- The Stratospheric Ozone Protection Act, mandated by EPA, requires that maintenance personnel who service refrigeration and air conditioning equipment be properly certified. Check with your Civil Engineering Unit (CEU);, Maintenance and Logistics Command (MLC) (v), (s), and (l) G-SEC (for Headquarters units); Naval Engineering Division (G-SEN); or state environmental representatives to determine the level of training required for your personnel. Cutters should check MTLs in Cutter Training and Qualification Manual.

- Training on the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) is recommended for personnel involved in planning activities for Headquarters units, MLCs, and CEUs.

- In addition, selected personnel may require specialized training on additional environmental topics, as directed by their job duties and related activities. Specialized training topics may address pertinent sections of the following regulations: the Clean Air Act (CAA), the Clean Water Act (CWA), the Endangered Species Act (ESA), and the Marine Mammal Protection Act (MMPA).

The Coast Guard's Program

Commanding Officers should...

- Ensure that your unit has an effective environmental training and education program that ensures the identification of all personnel with environmental training needs, resource availability to support required training, and adequate documentation of training received for each affected individual. Contact your unit Training Officer or servicing CEU, MLC, G-SEC (for Headquarters' units), NESU, or G-SEN for interpretation of environmental training requirements, assistance with training program development and implementation, and to obtain information on training resource availability.

References

COMDTINST M16478.1B, "Hazardous Waste Management Manual."

Federal OSHA regulations addressed in 29 CFR 1910

Federal EPA regulations addressed in 40 CFR

Federal DOT regulations addressed in 49 CFR

Applicable state environmental regulations with training and/or certification mandates

Directory of InterService Environmental Education Review Board (ISEERB)-approved courses available to Coast Guard personnel (issued annually by G-SEC-3).

Uniform National Discharge Standards

What Are They?

Uniform National Discharge Standards (UNDS) set a consistent set of national effluent standards for vessels of the Armed Forces, including all Coast Guard vessels. Currently, discharge standards may vary from port to port. The UNDS identifies those discharges requiring Marine Pollution Control Devices (MPCDs), as well as discharges exempted from controls. An MPCD may be a piece of equipment or a best management practice installed or used onboard a vessel to control a discharge. The UNDS will eventually provide MPCD performance and use standards.

The UNDS will enhance environmental protection, encourage development of vessels that can operate in an environmentally sound manner, and encourage development of new pollution control devices.

Current Regulations

Section 325 of the 1996 National Defense Authorization Act (NDAA), entitled *Discharges from Vessels of the Armed Forces,* amended Section 312 of the Clean Water Act (CWA) to provide the Department of Defense (DOD) and the U.S. Environmental Protection Agency (EPA) authority to jointly establish the UNDS for incidental liquid discharges from vessels of the Armed Forces. In this legislation, the term 'vessels' is defined to include Coast Guard vessels. The UNDS is applicable from 0 to 12 nautical miles from the U.S. coastline and inland navigable waters. MPCD performance standards, when developed, may vary with distance from the shore.

The UNDS is being developed in three phases. Phase I identified vessel discharges incidental to normal operation and evaluated discharges to determine which require and do not require control (see following table). States are prohibited from regulating discharges exempted from control, other than to establish no-discharge zones for these discharges. The Final Phase I regulations (40 CFR Part 9 and Chapter VII) became effective in June 1999.

Phase II regulations will, when completed, determine performance standards for MPCDs for those discharges identified in Phase I as requiring an MPCD. Phase II standards may distinguish among vessel types and sizes. Phase III will establish requirements for the design, construction, installation, and use of MPCDs.

Phase II MCPD performance standards are scheduled to be released in 2001, and Phase III regulations are scheduled for release in 2002. Every 5 years, DOD and EPA will review the discharge determinations and MPCD performance standards and revise them if necessary.

Discharges, Other Than Sewage, Incidental To The Normal Operation Of Vessels Of The Armed Forces

40 CFR Part 9 and Chapter VII

Discharges Requiring Marine Pollution Control Devices:

- Aqueous Film-Forming Foam
- Catapult Water Brake Tank and Post-Launch Retraction Exhaust
- Chain Locker Effluent
- Clean Ballast
- Compensated Fuel Ballast
- Controllable Pitch Propeller Hydraulic Fluid
- Deck Runoff
- Dirty Ballast
- Distillation and Reverse Osmosis Brine
- Elevator Pit Effluent
- Firemain Systems
- Gas Turbine Water Wash
- Graywater
- Hull Coating Leachate
- Motor Gasoline Compensating Discharge
- Non-Oily Machinery Wastewater
- Photographic Laboratory Drains
- Seawater Cooling Overboard Discharge
- Seawater Piping Biofouling Prevention
- Small Boat Engine Wet Exhaust
- Sonar Dome Discharge
- Submarine Bilgewater
- Surface Vessel Bilgewater/Oil Separator Discharge
- Underwater Ship Husbandry
- Welldeck discharge

Discharges Exempted From Controls:

- Boiler Blowdown
- Catapult Wet Accumulator Discharge
- Cathodic Protection
- Freshwater Lay-up
- Mine Countermeasures Equipment Lubrication
- Portable Damage Control Drain Pump Discharge
- Portable Damage Control Drain Wet Exhaust
- Refrigeration/Air Conditioning Condensate
- Rudder Bearing Lubrication
- Steam Condensate
- Stern Tube Seals and Underwater Bearing Lubrication
- Submarine Acoustic Countermeasures Launcher Discharge
- Submarine Emergency Diesel Engine Wet Exhaust
- Submarine Outboard Equipment Grease and External Hydraulics

The Coast Guard's Program

Commanding Officers should....

- Determine if Coast Guard vessels under their command discharge effluents regulated under Phase I of the UNDS;
- When available, implement MPCDs onboard vessels to control regulated discharges; and
- Ensure MPCDs are designed, constructed, installed, and used in accordance with Phase III UNDS regulations, when available.

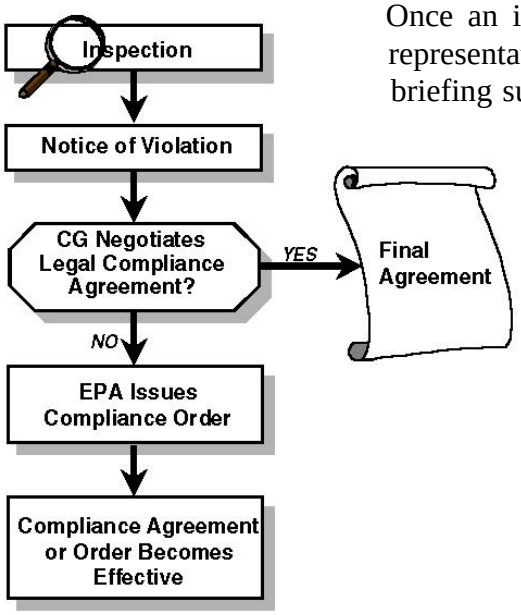
References

Federal Regulations pertaining to the UNDS and the NDAA are contained in Title 40 CFR Part 9 and Chapter VII.

Unit Inspections

The state and/or regional office of the Environmental Protection Agency (EPA) will generally notify you of its intent to inspect your unit. However, by law, regulatory agencies are authorized to inspect Federal facilities at any time without notice. For security reasons, cutter commanders should allow state and local inspectors access only to areas of Coast Guard cutters they legitimately require to perform their function. The regulatory inspections normally concentrate on one program area, such as hazardous waste management. Under the EPA Federal Facility Compliance strategy, inspection frequency guidelines have been established. For example, inspections for hazardous waste facilities under the Resource Conservation and Recovery Act (RCRA) generally occur annually. Inspections in other program areas may occur at different frequencies (see the following table). However, "multimedia" inspections are taking place more frequently. These inspections involve groups of environmental regulatory experts who will review all areas of compliance at one time.

During an inspection be cordial and honest. Don't try to hide or cover up anything. Show the inspector what he/she wants to see – however, you are not required to show him/her every environmental compliance problem you are having. Inspections are not "fishing expeditions." Try to keep the questions and answers on both sides focused on the specific regulatory areas and issues that the inspector wants to see. It is at this time that well maintained, accessible, organized and understood records can make the difference between a Notice of Violation (NOV) and no NOV.



Once an inspection is completed, the regulatory agency representative will normally provide you with an exit briefing summarizing his or her findings. The regulatory agency normally does not produce a written report, *per se*. Instead, you will receive a letter (normally within three to six months after the inspection) defining any noncompliance situations. This letter is often referred to as a Notice of Violation (NOV) or Notice of Noncompliance (NON). This letter will document your compliance status based on the inspection and request you to provide a response detailing your corrective action plan. If the regulatory agency finds you in compliance, you may or may not receive written confirmation. After three to four months, you may want to contact the agency to confirm your installation's compliance status.

Environmental compliance is a normal part of Coast Guard business.

POTENTIAL FOR INSPECTIONS

MEDIA PROGRAM	FACILITY	FREQUENCY*	TYPE OF INSPECTIONS
Hazardous Waste (RCRA)	All Federal Treatment, Storage, and Disposal Facilities (TSDFs)	Annual	Compliance evaluation inspection: • Ground water • Record review • Site inspection
		Every 3 years	Comprehensive monitoring evaluation for ground water
	Generators and Transporters	4 times/year	Housekeeping, training, & storage
	Solid/Hazardous Waste Management Units at TSDFs	---	Identification of Solid Waste Management Units (SWMUs) or determination of releases through RCRA Facility Assessments (RFAs) and RCRA Facility Investigations (RFIs)
Water [National Pollutant Discharge Elimination System (NPDES)]	Major	Major: annually	Compliance sampling
	Minor	Minor: as resources allow	Compliance evaluation
			Performance audit
			Toxic inspection
Air (Clean Air Act) (Stationary Sources)	Class A-1 Sources (Major source of pollutants) and all National Emissions Standards for Hazardous Air Pollutants (NESHAPs)	Annual	Level II - minimum acceptable inspection Level III - detailed inspection of process and operating equipment
	Class A-2 Sources (Potentially major source of pollutants)	Biannual	---
	New Source Performance Standard (NSPS) Sources	Quarterly Excess Emissions Reports (EERs)	---
	Class B Volatile Organic Compound (VOC) Sources (Minor source of pollutants)	Per statistical model in Small Source Strategy (7/6/87)	---
	Class B Sources (minors, excluding NESHAPs)	At state's discretion	---
Drinking Water (SDWA) (Definitions for injection well classifications are located in 40 CFR146.5.)	Class IV wells	Annual (Top Priority) (non-banned)	Mechanical Integrity Tests (MITs)
	Class I wells	Annual	All MITs, corrective actions and plunging to be witnessed
	Class II wells	Generally annual	Routine with 25% MITs
	Class IV wells	Inspected when found or suspected of polluting underground sources of drinking water (USDW)	Routine inspection

* These are the EPA's minimum inspection frequency goals. EPA or states may and often do inspect sources more frequently.

The Coast Guard's Program

Commanding Officers should....

- Establish an active environmental training and awareness program;
- Ensure up-to-date operations procedures exist that incorporate environmental considerations;

- Ensure that Environmental Compliance Evaluations (ECEs) are conducted at your facility and corrective actions are initiated promptly;
- Establish a regular program of environmental internal check-ups for your unit and correct all deficiencies identified; and
- Know who to contact for information and help.

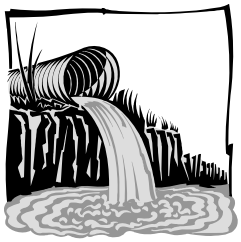
If you determine that you may have a compliance problem, you should:

- Notify your servicing Civil Engineering Unit (CEU);, Maintenance and Logistics Command (MLC) (v), (s), and (l);or Naval Engineering Division (G-SEN); or G-SEC (for Headquarters' units) to develop a plan to get into compliance. In some situations it may be necessary for your legal advisors to negotiate with a regulatory agency to set compliance requirements and timetables;
- Request the necessary funds via your chain of command with an information copy to your servicing CEU, MLC, or G-SEC;
- Prepare and submit a Shore Station Maintenance Request (SSMR) or a Current Ship's Maintenance Project (CSMP) report for each physical project requirement;
- Take action to implement your plan to get into compliance; and
- Seek help from support units, as appropriate.

To achieve and maintain environmental compliance, you must develop a strong awareness of environmental requirements for your unit. The most important step for achieving and maintaining compliance is to make it a priority to which you have publicly committed yourself and your command.

Wastewater/Storm Water Management

What Is It?



Because water is one of the most significant natural resources used in both the home and the work place, preservation of this resource is of great importance. A typical unit generates wastewater from both sanitary and industrial uses. Storm water is the runoff that results from rain falling on roofs, roads, parking lots, loading docks, runways and other areas exposed to rain. Pollutants may dissolve in the storm water, become suspended, or float on the surface. The runoff and pollutants are then discharged into receiving waters, such as streams or lakes. Adequate treatment of these waste streams ensures this resource is renewed and that the quality of the water receiving the treated effluent is maintained.

Current Regulations

The Water Pollution Control Act, as amended by the Clean Water Act (CWA) of 1977 (further amendments through 1987), has the objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's navigable waters.

The CWA incorporates provisions for regulation of both domestic and industrial wastewaters. The primary tool for wastewater management is the National Pollutant Discharge Elimination System (NPDES). In 1990, the Environmental Protection Agency (EPA) issued a regulation requiring NPDES permits for discharge of storm water from certain point sources. Additional stormwater sources have since been added to the regulations.

The NPDES requires permits for the discharge of pollutants from any point source into waters of the U.S. Permits are required for industrial facilities as well as facilities treating domestic wastewater. NPDES permits typically contain limits on the quantities of specific pollutants which can be discharged from the permitted unit. Violations of effluent limitation standards contained in NPDES permits are subject to penalties. These permits also contain requirements for sample collection and analysis of wastewater discharge at a specified frequency and reporting of results to permit authorities.

Any permit issued to a unit contains specific effluent limitations and a compliance schedule to meet the limitations. Technology-based treatment requirements form the basis of the effluent limitations. In addition, EPA or the state may regulate toxic pollutants which could impact the water quality of the receiving stream.

An important component of the NPDES permitting process is the pretreatment program which sets standards for the control of waste from indirect discharges - those industrial sources of pollution which discharge effluent to municipal wastewater treatment facilities rather than directly into water bodies. EPA has issued categorical pretreatment standards

for certain industrial users. States and local municipalities can also develop their own discharge standards to regulate indirect industrial waste.

Another portion of the CWA concerns water quality planning and management. Components of water quality planning include the establishment of water quality standards (WQS). A WQS (usually established by individual states) defines the water quality goals for a water body by designating the use or uses of the water and by setting criteria necessary to protect those uses. States and EPA adopted WQSs to protect public health and welfare and to enhance water quality. The CWA contains a provision for citizen suits against private industry or government agencies for violating effluent standards.

The Coast Guard's Policy

Objectives…

- Develop a Coast Guard-wide program to comply with EPA regulations for industrial activity point source pollution and storm water discharge requirements;
- Develop and implement "best management practices" at units to prevent water body contamination from storm water runoff;
- Achieve compliance with all existing NPDES permits;
- Comply with permit conditions for discharge of treatment plant sludge into navigable waters (incineration of sludge must comply with air and hazardous waste (HW) requirements, and land disposal of sludge must comply with applicable CWA and Resource Conservation and Recovery Act (RCRA) requirements).

Commanding Officers should…

- Identify opportunities for Best Management Practices for reducing contaminated stormwater discharges;
- Ensure stormwater pollution prevention plans are kept up to date;
- Review, sign, and forward all applications for permits to construct wastewater treatment facilities;
- Provide the resources for operation performance monitoring, sampling, and testing, as well as for maintaining and demonstrating compliance with permit and pretreatment requirements and maintain records of all monitoring information;
- Comply with the requirements if discharging to a publicly or Coast Guard-owned treatment works, or if responsible for the operation of treatment works, industrial waste treatment processes, or pretreatment processes;

- Identify and submit environmental compliance projects required to bring wastewater sources into compliance with applicable non-routine, nonrecurring requirements; and
- Obtain all necessary in-water construction permits.

References

COMDTINST M11000.11A, "Civil Engineering Manual."

COMDTINST M11300.2, "Water Supply and Waste Water Disposal Manual."

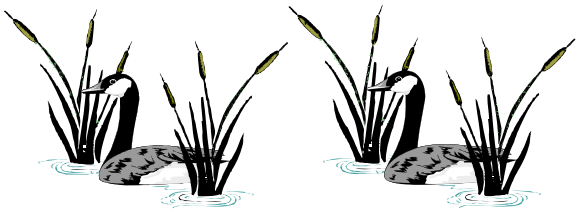
COMDTINST M16478.1B, "Hazardous Waste Management Manual."

COMDTPUB 11300.3, "Storm Water Management Guide."

Federal Regulations pertaining to the CWA are contained in Title 40 CFR Parts 100 through 149.

Wetlands

What Are They?



Wetlands is the collective term for marshes, swamps, bogs, and similar areas that are located between open water and dry land. Wetlands are a valuable natural resource that help improve water quality, reduce flood and storm damage, provide important fish and wildlife habitats, and support hunting and fishing activities. In general, two broad categories of wetlands are recognized: tidal wetlands and nontidal wetlands. Tidal wetlands include unvegetated mud flats, sand flats, marshes, estuaries, and mangrove swamps. Nontidal wetlands are common on floodplains along rivers and streams, in isolated depressions surrounded by dry land, and along the margins of lakes and ponds.

Current Regulations

Executive Order 11990 directed Federal agencies to avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands whenever there is a practicable alternative. The major Federal wetlands regulations are jointly administered by the Corps of Engineers (COE) and EPA. The Clean Water Act (CWA) establishes a permit program to regulate the discharge of dredge and fill material into waters of the U.S., including most wetlands. The USFWS and the NMFS have important advisory roles in the permit review process. To provide leadership for the wetlands program, EPA established an Office of Wetlands Protection in 1986.

The government has taken various approaches to wetlands protection, including acquisition, economic incentives, and regulation. Acquisition involves purchasing wetlands or easements on wetlands and establishing wildlife refuges, sanctuaries, or conservation areas. Economic incentives have been provided under the Federal tax code, whereby landowners and industries who sell or donate wetlands to a government agency can claim the value of the land as a charitable deduction.

Regulation of wetlands is not limited to the Federal level. Over the last 30 years, numerous states have enacted laws to regulate activities in wetlands, and some towns have adapted local wetlands protection ordinances.

The Coast Guard's Program

Objectives....

- Act responsibly in the public interest to improve, preserve, and properly utilize wetland resources on USCG lands;
- Ensure resolution of wetland issues;
- Ensure compliance with wetland resource protection statutes; and
- Act as trustee for wetlands under facility jurisdiction.

Commanding Officers should...

- Maintain records necessary to monitor and evaluate wetland resources under the facility jurisdiction; and
- Take appropriate action to avoid direct and indirect adverse impacts to wetlands through training and consultation with your servicing environmental staff.

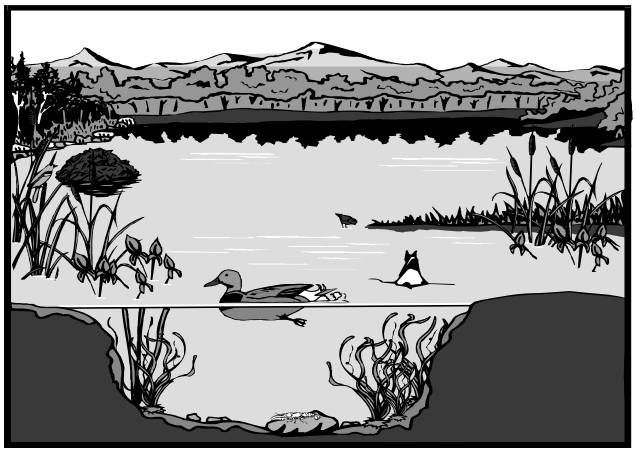
References

DOT ORDER 5660.1A, “Preservation of the Nation’s Wetlands.”

COMDTINST M5090.3, “Natural Resources Management.”

Executive Order 11990, “Protection of Wetlands.”

EPA regulations pertaining to wetlands are contained in Title 40 CFR Part 230. Subpart E, Section 230.41 outlines the potential impacts of dredge and fill material on special aquatic sites, specifically wetlands. The regulatory program for COE is contained in Title 33 CFR Parts 320 through 330.



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Appendix A
Additional Resources

Where Do I Go For Help?

Listed below are points of contact and other sources of information for specific program areas and technical elements described in this guide. It is important to be aware of EPA, state regulatory agency, and local sources of information which may be helpful to personnel at individual units, but internal Coast Guard resources should be utilized first before going to external agencies for help.

NATIONAL RESPONSE CENTER (800) 424-8802

(For Emergencies including spills, fire, or explosion)

HOTLINE NUMBERS (EPA)

RCRA/Superfund/UST:	(800) 424-9346
Indoor Air Quality Information	(800) 438-4318
Emergency Planning and Community Right-to-Know	(800) 535-0202
National Pesticides Telecommunications Network	(800) 858-7378
TSCA Assistance Information Service	(202) 554-1404
Asbestos	(800) 221-6409
Drinking Water Hotline	(800) 426-4791

COAST GUARD HEADQUARTERS

Office of Civil Engineering (G-SEC)

Chief, Environmental Management Division	(202) 267-2369
Coast Guard Facilities Energy Manger	(202) 267-2699

Office of Naval Engineering Office (G-SEN)

Chief, Office of Naval Engineering	(202) 267-1220

Aeronautical Engineering Office (G-SEA)

Chief, Program Management Division	(202) 267-0187
Chief, Office of Logistics Policy (G-SLP)	(202) 267-0664
Office of Environmental Law (G-LEL)	(202) 267-6000
Chief, Office of Procurement Management (G-CPM)	(202) 267-1146

FACILITIES DESIGN AND CONSTRUCTION CENTER ATLANTIC

Chief, Environmental Branch	(757) 852-3400

MAINTENANCE AND LOGISTICS COMMAND ATLANTIC

Chief, Environmental Compliance Branch	(757) 628-4247
Chief, General Law Branch (lg)	(757) 628-4193

MAINTENANCE AND LOGISTICS COMMAND PACIFIC

Chief, Environmental Section (se)	(510) 437-3973
Chief, Environmental Law Branch (1e)	(510) 437-3351
Vessels Environmental Engineer (vsem)	(510) 437-5803

FACILITIES DESIGN AND CONSTRUCTION CENTER PACIFIC

Environmental Engineer	(206) 220-7400
PACAREA Center of Excellence for Energy Conservation	(206) 220-7400

CIVIL ENGINEERING UNIT PROVIDENCE

Chief, Environmental Section	(401) 736-1700

CIVIL ENGINEERING UNIT CLEVELAND

Chief, Environmental Section	(216) 522-3934

CIVIL ENGINEERING UNIT MIAMI

Chief, Environmental Section	(305) 278-6705

CIVIL ENGINEERING UNIT OAKLAND

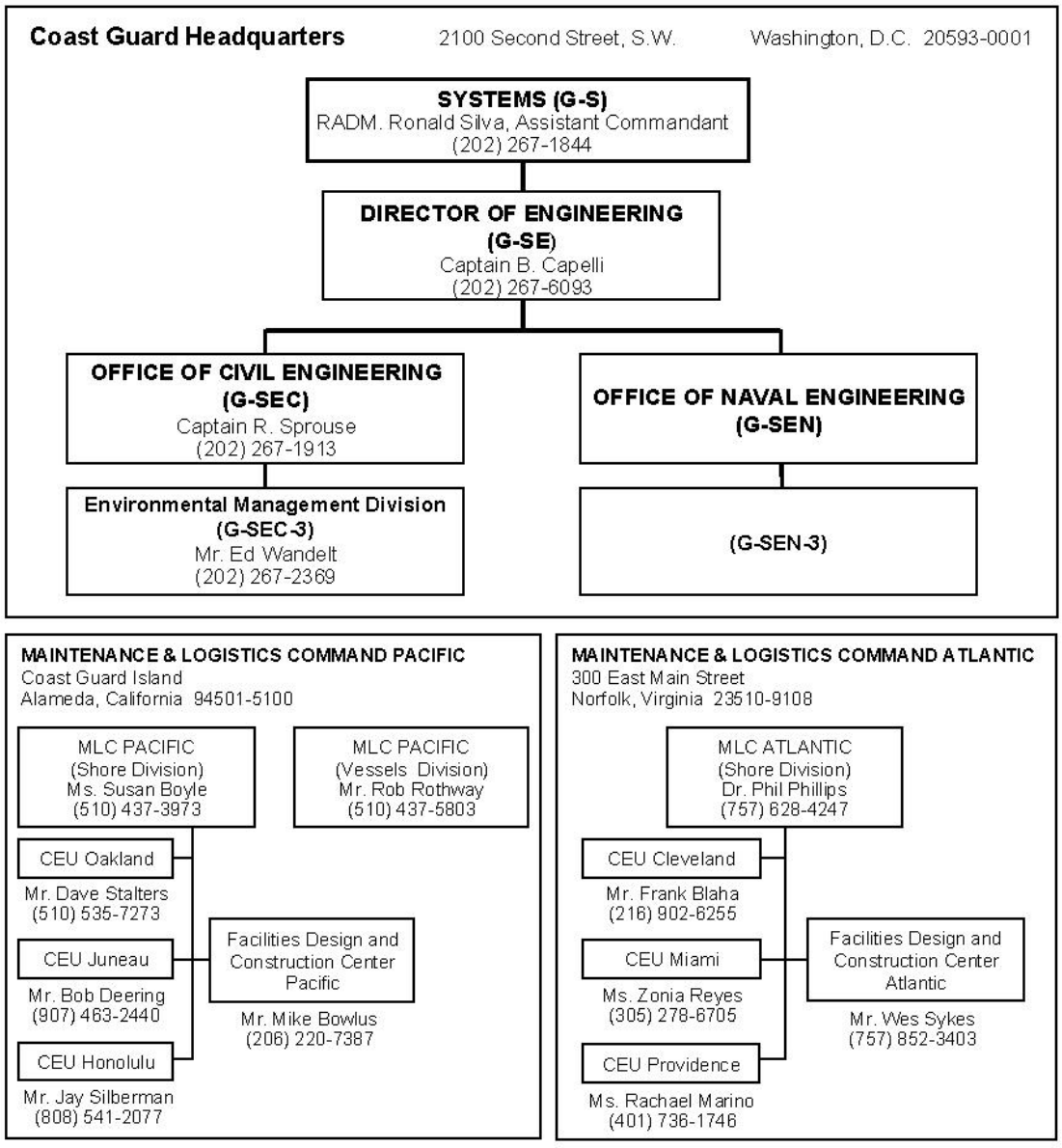
Chief, Planning and Environmental Division	(510) 535-7237

CIVIL ENGINEERING UNIT HONOLULU	(808) 541-2077
CIVIL ENGINEERING UNIT JUNEAU	(907) 463-24400

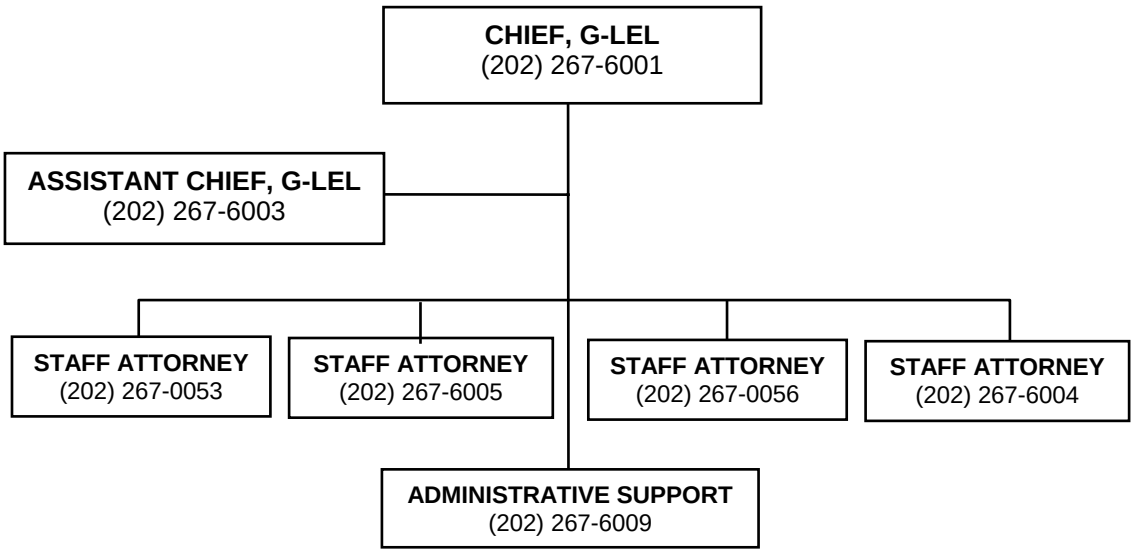
EPA REGIONS

EPA REGION I (CT, MA, ME, NH, RI, VT)	(617) 565-3420
EPA REGION II (NJ, NY, PR, VI)	(212) 637-3000
EPA REGION III (DE, MD, PA, VA, WV, D.C.)	(215) 597-9800
EPA REGION IV (AL, FL, GA, KY, MS, NC, SC, TN)	(404) 347-3043
EPA REGION V (IL, IN, MI, MN, OH, WI)	(312) 353-2000
EPA REGION VI (AR, LA, NM, OK, TX)	(214) 655-6444
EPA REGION VII (IA, KS, MO, NE)	(913) 551-7000
EPA REGION VIII (CO, MI, ND, SD, UT, WY)	(303) 293-1603
EPA REGION IX (AZ, CA, HI, NV, Guam, American Samoa)	(415) 744-1305
EPA REGION X (AK, ID, OR, WA)	(206) 553-4973

The Coast Guard's Environmental Compliance and Restoration Organization



United States Coast Guard
Environmental Law Division (G-LEL)



Appendix B
Environmental Acronyms

Environmental Acronyms

ACHP	Advisory Council on Historic Preservation
AC&I	Acquisition, Construction, and Improvement
AFC	Allotment Fund Code
ARPA	Archeological Resources Preservation Act
ANT	Aids to Navigation Teams
APPS	Act to Prevent Pollution from Ships
AST	Aboveground Storage Tank
ATON	Aids to Navigation
BA	Biological Assessment
BMP	Best Management Practice
CAA	Clean Air Act (1977)
CAAA	Clean Air Act Amendments of 1990 (also referred to as CAA90)
CE	Categorical Exclusion
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (1980) amended by the Superfund Amendments and Reauthorization Act (S
CESQG	Conditionally Exempt Small Quantity Generator
CEU	Civil Engineering Unit
CEQ	Council on Environmental Quality
CFC	Chlorofluorocarbons
CFR	Code of Federal Regulations
CHRIS	Chemical Hazards Response Information System
COE	U.S. Army Corps of Engineers
COMDTINST	Commandant's Instructions
CONUS	Continental United States
CPSC	Consumer Products Safety Commission
CSMP	Current Ship's Maintenance Project
CWA	Clean Water Act (1972-1987)
CZMA	Coastal Zone Management Act
dB	Decibel. Measure of loudness or intensity of sound.
DMR	Discharge Monitoring Report
DLA	Defense Logistics Agency

DNR	Department of Natural Resources
DOD	Department of Defense
DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Office (formerly DPDO)
EA	Environmental Assessment
ECE	Environmental Compliance Evaluation
EC&R	Environmental Compliance and Restoration
EER	Excess Emission Report
EHS	Extremely Hazardous Substances
EIS	Environmental Impact Statement
EPCRA	Emergency Planning and Community Right-to-Know Act. Also known as SARA Title III.
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
FFA	Federal Facility Agreement
FFCA	Federal Facility Compliance Act (1992); also Federal Facility Compliance Agreements
FFDCA	Federal Food, Drug, and Cosmetic Act (1938)
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act (1972)
FONSI	Finding of No Significant Impact
FS	Feasibility Study
FWPCA	Federal Water Pollution Control Act
HAZCOM	Hazard Communication
HAZMIN	Hazardous Waste Minimization
HCFC	Hydrochlorofluorocarbon
HM or HAZMAT	Hazardous Material
HMMS	Hazardous Materials Management System
HMTA	Hazardous Materials Transportation Act
HRS	Hazard Ranking System
HS	Hazardous Substances
HSWA	Hazardous and Solid Waste Amendments (1984)
HVAC	Heating Ventilation and Air Conditioning

HW	Hazardous Waste
IAG	Inter-Agency Agreement
IAS	Initial Assessment Survey
IPM	Integrated Pest Management
ISEERB	Inter Service Environmental Education Review Board
LEPC	Local Emergency Planning Committee
LQG	Large Quantity Generator
MARPOL	International Maritime Convention for the Prevention of Pollution from Ships
MCL	Maximum Containment Level
MIT	Mechanical Integrity Tests
MLC (A, P)	Maintenance and Logistics Command (Atlantic or Pacific)
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPCD	Marine Pollution Control Devices
MPRSA	Marine Protection, Research, and Sanctuaries Act
MSDS	Material Safety Data Sheet
NAAQS	National Ambient Air Quality Standards
NCP	National Contingency Plan
NDAA	National Defense Authorization Act (1996)
NEPA	National Environmental Policy Act (1969)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NESU	Naval Engineering Support Unit
NHPA	National Historic Preservation Act
NMFS	National Marines Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NON	Notice of Non-compliance
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service

NRC	National Response Center
NRM	Natural Resources Management
NSPS	New Source Performance Standard
OCONUS	Outside the Continental United States
ODS	Ozone Depleting Substances
OE	Operating Expenses
OHS	Oil and hazardous substance
OPA	Oil Pollution Act of 1990
OPP	Office of Pesticide Programs
OSHA	Occupational Safety and Health Act/Administration
P2	Pollution Prevention
P2OA	Pollution Prevention Opportunity Assessment
PA	Preliminary Assessment
PAO	Public Affairs Office or Public Affairs Officer
PCBs	Polychlorinated Biphenyls
pCi/L	Picocurie per liter
PCR	Pollution Control Report
pH	A measure of a liquid's acid/base properties. Literally 'per hydrogen'
POTW	Publicly- owned Teatement Works
PPE	Personal Protective Equipment
PRP	Potentially Responsible Party
QRP	Qualified Recycling Program
RAO	Responsible Action Official
RCRA	Resource Conservation and Recovery Act (1976)
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
ROD	Record of Decision
SAR	Search and Rescue
SARA	Superfund Amendments and Reauthorization Act (1986) amended and reauthorized CERCLA (1980)
SDWA	Safe Drinking Water Act (1974)

SERC	State Emergency Response Commission
SHPO	State Historic Preservation Officer
SI	Site Inspection
SIP	State Implementation Plan
SMSA	Standard Metropolitan Statistical Area
SOFA	Status of Forces Agreement
SOH	Safety and Occupational Health
SPCC	Spill Prevention, Control and Countermeasures Plan
SPDES	State Pollutant Discharge Elimination System
SQG	Small Quantity Generator
SSMR	Shore Station Maintenance Request
SWDA	Solid Waste Disposal Act
SWMU	Solid Waste Management Unit
TSCA	Toxic Substances Control Act of 1976
TSDF	Treatment, Storage, and Disposal Facility
UNDS	Uniform National Discharge Standards
USDW	Underground Sources of Drinking Water
USFWS	U.S. Fish and Wildlife Service (of DOI)
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WQS	Water Quality Standard

Appendix C
Inspection Questionnaires

Questions for Your Environmental Coordinator

*Page numbers in the right-hand column indicate the page in the Commanding Officer's Environmental Guide on which information pertaining to the question can be found.

Questions that Cutter Commanding Officers should ask are located on page 155.

		YES	NO	N/A	Page*
	Overall Facility Program				
1.	Who is the unit environmental point of contact?_____				
2.	Who are our environmental support staff? Where are they located? When was the last time we coordinated our activities with them? _____ _____				
3.	Is our facility in compliance? (May answer after completing all questionnaires)	☐	☐	☐	
4.	Do we have sufficient staff and resources to ensure environmental compliance?	☐	☐	☐	
5.	Does the unit Hazardous Waste Coordinator/Pollution Prevention Coordinator regularly coordinate action with the Integrated Support Command (ISC), Civil Engineering Unit (CEU), Maintenance and Logistics Command (MLC), or the Environmental Management Division (G-SEC) (for Headquarters' units)?	☐	☐	☐	50/86
6.	Have all personnel who require it received proper environmentally-related training? (Should include, at a minimum, the hazardous waste coordinator, handler, storekeepers, and air conditioning technicians.)	☐	☐	☐	116
7.	Have all our people been properly trained to do their jobs (including environmental awareness and pollution prevention)?	☐	☐	☐	116
8.	Has all regulatory-mandated training been completed and records retained?	☐	☐	☐	116
9.	Are the records of the testing maintained in a retrievable fashion and protected from accidental destruction in your facility?	☐	☐	☐	116
	General Environmental Compliance				
1.	What Notices of Violations (NOVs) or other regulatory enforcement orders have we received during the past year? During the past five years? _____ _____			☐	73

		YES	NO	N/A	Page*
2.	What NOVs or other enforcement orders are still outstanding? _____			☐	73
3.	Do we currently have any Compliance Agreements or Consent Orders?	☐	☐	☐	73
4.	Do we have a positive working relationship with the regulatory agencies?	☐	☐	☐	
5.	What environmental Shore Station Maintenance Requests (SSMRs) or Current Ships Maintenance Projects (CSMPs) have we submitted? _____			☐	119
6.	When was our last regulatory agency inspection done? _____			☐	120
7.	Have we had an Environmental Compliance Evaluation (ECE) within the past 3 years? By whom? What deficiencies were found? What is being done to correct those deficiencies? _____ _____				40

Hazardous Waste Management Program

1.	Are oils, greases, fuels, chlorinated hydrocarbons, soaps, acids, corrosives, metals, or other substances classified as hazardous pollutants used in our facilities? Do we engage in the application of pesticides or generate any pesticide wastes?	☐	☐	☐	50
2.	Has a hazardous waste inventory been performed?	☐	☐	☐	50
3.	How much and what type of hazardous waste do we generate each month? _____			☐	50
4.	Do we use or store any Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) listed materials?	☐	☐	☐	50
5.	Has our facility used more than 500kg annually of any of the chemicals listed in Part 712.30 of the Code of Federal Register (Toxic Substances)? If so, have we submitted a Preliminary Assessment Information Form to the EPA regarding the substance?	☐	☐	☐	50
6.	Is the unit a Conditionally Exempt Small Quantity Generator (CESQG), Small Quantity Generator (SQG), or Large Quantity Generator (LQG)?	☐	☐	☐	50
7.	Do we need and have an Environmental Protection Agency (EPA) ID number?	☐	☐	☐	50
8.	Do we have a designated appropriate Hazardous Waste Manager/Pollution Prevention Coordinator for hazardous materials and waste?	☐	☐	☐	50/86
9.	Do we need and have a Resource Conservation and Recovery Act (RCRA) Part B Permit or is a RCRA Part B Permit Application pending approval?	☐	☐	☐	50

		YES	NO	N/A	Page*
10.	Do we have a corrective action requirement to fulfill under the RCRA Part B Permit? Who is addressing it and when is it due? What additional work (i.e., closure) will be required? How many Solid Waste Management Units (SWMUs) are on the Part B permit? What is their status?	☐	☐	☐	50
11.	Does our HW management plan and RCRA contingency plan include the current organization, business practices and personnel?	☐	☐	☐	50
12.	Are the state regulations more stringent than those of EPA?	☐	☐	☐	50
13.	Do we have a host-tenant agreement with each of the tenant units?	☐	☐	☐	50
14.	Are there any problems with tenant organizations complying with our facility requirements?	☐	☐	☐	50
15.	Do the host/tenant agreements spell out the tenant's responsibilities?	☐	☐	☐	50
16.	Are the following documents, (1) manifests and signed copies from received facilities, (2) biannual reports, (3) exception reports, (4) test results maintained at the facility for the three years required?	☐	☐	☐	104
	Personnel Requirements				
17.	Has the Hazardous Waste Coordinator been trained within 6 months of his/her designation and retrained annually?	☐	☐	☐	116
18.	Does he/she know the reportable quantity levels for a CERCLA substance spill/release?	☐	☐	☐	97
19.	Are the appropriate employees trained in the handling of hazardous materials and waste and are proper records maintained as documentation?	☐	☐	☐	104/ 116
20.	Do job descriptions exist for each position at the facility including the amount of training required for the position?	☐	☐	☐	116
21.	Are notification procedures implemented to inform employees of potential exposure to hazardous substances?	☐	☐	☐	50
22.	Are personnel protective devices, clothing, gloves, etc., readily available to employees handling hazardous substances?	☐	☐	☐	50
23.	Are employees informed of their right to information concerning substances in their workplace?	☐	☐	☐	50
24.	Are Material Safety Data Sheets (MSDSs) for our raw materials and process streams kept on file?	☐	☐	☐	50
25.	Are the MSDSs for the raw materials available to the employees and employee physician upon request?	☐	☐	☐	50
	Hazardous Waste Storage				

		YES	NO	N/A	Page*
26.	Are the storage areas identified and protected with security barriers and secondary containment equal to the largest container?	☐	☐	☐	50
27.	Is any volume of hazardous wastes stored at the facility for more than 90 days? (Storage of hazardous waste for more than 90 days may be of concern, depending on the quantity.) How long is the waste stored at the site? _____	☐	☐	☐	50
28.	Are storage containers marked in accordance with DOT *requirements?*	☐	☐	☐	50
29.	Are the containers and storage vessels in contact with storm water?	☐	☐	☐	86
30.	Are all containers used for paints, solvents, cleaning fluids, fuels, etc. clearly marked and of the proper type?	☐	☐	☐	50/86
31.	Are ignitable or reactive substances stored at least 50 feet from the facility boundaries?	☐	☐	☐	50
32.	Are written procedures in effect for periodic inspection of hazardous material containment facilities? Are the inspections up to date and documentation retained?	☐	☐	☐	50/86
33.	Do we have hazardous waste in lagoons, surface impoundments or ponds? (A "yes" answer may be of concern.)	☐	☐	☐	50
34.	Is a spill reporting procedure in place? (see *Emergency Response*)	☐	☐	☐	42/97
35.	Are records kept of the volume and location of all hazardous substances at the facility?	☐	☐	☐	104
	Hazardous Waste Disposal				
36.	Are wastes treated or disposed of on site? (Answer should be "no," unless the unit is a TSDF.)	☐	☐	☐	50
37.	Are waste streams properly segregated?	☐	☐	☐	50/ 110
38.	Has each waste stream been analyzed to determine whether it is a characteristic hazardous waste or a listed waste prior to treatment, recycling, or disposal?	☐	☐	☐	50/ 110
39.	How do we dispose of our hazardous materials and waste?_____ _____ Is there a more efficient of economical aalternative?_____				50/86
40.	Are hazardous wastes mixed with non-hazardous wastes? (A "yes" answer may be of concern.)	☐	☐	☐	50/ 110
41.	Do we use the Defense Reutilization and Marketing Office (DRMO)?	☐	☐	☐	86

		YES	NO	N/A	Page*
42.	Are hazardous waste manifests being properly filled out and filed?	☐	☐	☐	50
43.	Has anyone checked the hazardous waste TSDF to ascertain that it complies with the law? If so, who has checked and when? _____ _____ _____	☐	☐	☐	50
44.	Have there been any liability problems with our hazardous waste disposal company?	☐	☐	☐	50
	Clean Air Program				
1.	Does the unit generate any air emissions, such as from sand blasting, painting, boilers, vehicles, or other sources?	☐	☐	☐	23
2.	Is the unit located in an EPA designated air pollution non-attainment area?	☐	☐	☐	23
3.	Do any air pollution sources at the unit require permits? Do we have the air pollution control permits? Are trip reduction plans required?	☐	☐	☐	23
4.	Does the unit use any ozone depleting substances (ODSs)? Is ODS recycling taking place?	☐	☐	☐	79
5.	Is the unit's ODS recovery and recycling equipment certified?	☐	☐	☐	79
6.	Are there personnel at the unit who are certified to operate refrigerant recycling/reclamation equipment?	☐	☐	☐	79/ 116
	Storage Tanks				
1.	Do we have any underground storage tanks located at the facility and has their presence been indicated to the appropriate agency?	☐	☐	☐	113
2.	Are inventories maintained and documented for size of and substances stored in underground tanks?	☐	☐	☐	113
3.	Have our USTs been leak tested? When?_____	☐	☐	☐	113
4.	How many aboveground storage tanks (ASTs) do we have? What are their capacities? _____			☐	113
5.	Do all regulated USTs and ASTs meet requirements of corrosion protection, leak detection, and spill control?	☐	☐	☐	113
	PCBs				
1.	Does the facility use PCB capacitors? Does any PCB transformer pose an exposure risk to food or feed?	☐	☐	☐	90
2.	Have all transformers been tested for PCB content?	☐	☐	☐	90
3.	Does the facility contain other PCB's, PCB equipment, containers of PCB's or PCB mixtures?	☐	☐	☐	90
4.	Has an Interim Measures Inspection Program been initiated?	☐	☐	☐	90

		YES	NO	N/A	Page*
5.	Has equipment containing PCB's been properly labeled?	☐	☐	☐	90
	Environmental Restoration				
1.	Do we have any sites on the facility addressed under the EC&R program? How many sites?_____	☐	☐	☐	45
2.	What is the status of any such sites? _____			☐	45
3.	Is this facility on the Federal Agency Hazardous Waste Compliance Docket?	☐	☐	☐	45
4.	Have Preliminary Assessment/Site Inspections been conducted in due time as required by CERCLA and the EPA?	☐	☐	☐	45
5.	Is a remedial investigation/feasibility study (RI/FS) underway?	☐	☐	☐	45
6.	Have all workers at the cleanup site received all legally mandated training prior to beginning work?	☐	☐	☐	45
	Emergency Response				
7.	Is a Facility Response Plan required for our facility? Do we transfer petroleum products in bulk to or from a cutter having an onboard storage capacity of 250 barrels of petroleum product (10,500 gallons)?	☐	☐	☐	42/97
8.	Do we transfer petroleum products over water or from cutters and have a total on-site oil storage capacity of 42,000 gallons or more?	☐	☐	☐	97
9.	Does our unit participate in an Emergency Planning and Community Right-to-Know Act (EPCRA) program?	☐	☐	☐	97
10.	What Coast Guard and private sector resources are available for responding to discharges of oils and hazardous substances? What is their response time? How much and what type of response resources (people and equipment) can they provide in a specific time? _____				42/97
11.	Who is the qualified individual authorized to implement the Facility Response Plan? Who is the On-Scene Coordinator in case of an emergency?_____				42/97
12.	Are key personnel identified in the Facility Response Plan who have responsibility and authority to react to any spill emergency?	☐	☐	☐	42/97
13.	Have the key personnel been made aware of their responsibility and liabilities with regard to notification in case of an accidental spill?	☐	☐	☐	42/97
14.	Have all personnel at the facility received training with regard to emergency environmental procedures? Has the training of personnel been documented with their acknowledgment indicated?	☐	☐	☐	42/97/ 116

		YES	NO	N/A	Page*
15.	Are drills run and training periodically updated through drills or other methods?	☐	☐	☐	42/97
16.	Are warning signs and emergency procedures posted in the facility as part of the implementation of the plan?	☐	☐	☐	42/97
17.	Are emergency communications, such as after hours phone lines, maintained at the facility?	☐	☐	☐	42/97
18.	If a reportable release occurs, does the facility have the following information as part of its record keeping: substance spilled, date, volume, cause, corrective actions taken, plans for prevention?	☐	☐	☐	42/97
19.	Have arrangements been made with local hospitals to accommodate possible injuries from handling hazardous substances at the facility?	☐	☐	☐	42/97
20.	Have local fire and emergency officials made inspections and a walk through of the facility?	☐	☐	☐	42/97
	Pollution Prevention				
1.	Do we have a waste minimization program to reduce the amount of hazardous and non-hazardous materials used and waste disposed?	☐	☐	☐	86
2.	Do we have a Pollution Prevention Plan? If so, are we implementing?_____	☐	☐	☐	86
3.	Have we conducted a pollution prevention opportunity assessment?	☐	☐	☐	86
4.	Do we have any pollution prevention projects submitted for funding? What is their status?_____	☐	☐	☐	86
5.	Are we a "covered facility" under COMDTINST M16455.10? _____	☐	☐	☐	86
6.	Have we completed and submitted EPCRA 302-312 reports to state and local officials?	☐	☐	☐	104
7.	Do we track HAZMAT procurement, use, and inventory?	☐	☐	☐	86
8.	Do we have an Authorized Use List? If so, do we update it and how often?_____	☐	☐	☐	86
9.	Do we regularly review our procurements to determine whether we can substitute recycled or recyclable products? _____	☐	☐	☐	86
10.	Have we prepared a recent P2 report for HQ G-SEC-3?	☐	☐	☐	86
11.	Do we have a recycling program? What additional items could be recycled?_____ _____	☐	☐	☐	86

		YES	NO	N/A	Page*
12.	Do we have any cooperative environmental programs with other organizations (such as resource recovery or recycling)?	☐	☐	☐	86
	Water Quality				
1.	What is the source of our drinking water? Do we treat our drinking water? What is its quality? _____	☐	☐	☐	31
2.	Does construction/operation of the water distribution system need to be approved by the state?	☐	☐	☐	31
3.	Do we obtain any portion of drinking water from on-site wells or surface water sources that are located on Coast Guard property?	☐	☐	☐	31
4.	Do we provide drinking water to non-Coast Guard tenants or to anyone off the facility?	☐	☐	☐	31
5.	Do we have an oil/water separator?	☐	☐	☐	31
6.	Does our facility use any processes that result in wastewater or other liquids? These operations may be secondary to your primary business such as pressure cleaning operations, rain water runoff from storage yards, machine cooling water, compressor condensate, floor washing, etc.	☐	☐	☐	122
7.	Do we have a National Pollutant Discharge Elimination System (NPDES) permit?	☐	☐	☐	122
8.	Do we have a State Pollution Discharge Elimination System (SPDES) permit?	☐	☐	☐	122
9.	How is it maintained and serviced? _____			☐	122
10.	Have our personnel been trained in its operation and maintenance?	☐	☐	☐	122
11.	Are any pollutants being discharged into groundwater? (A "yes" answer is a serious concern.)	☐	☐	☐	122
12.	Do we have any wastewater or storm water discharge permits under the NPDES/SPDES?	☐	☐	☐	122
13.	What is the status of the permits? _____			☐	122
14.	Do we meet our permit discharge quality and quantity limitations?	☐	☐	☐	122
15.	Has the Storm water Runoff been tested for contaminants?	☐	☐	☐	122
16.	Has a Storm water Discharge Plan been developed to minimize and control any contamination of runoff from the facility.	☐	☐	☐	122
17.	How is our sewage treated or disposed? _____				122
18.	Does our facility discharge to a Publicly Owned Treatment Works (POTW), a sewage treatment plant?	☐	☐	☐	122

		YES	NO	N/A	Page*
19.	Does the discharge to the POTW include any water other than sanitary water such as lab sink or floor drain from a work area where contaminants may be in the water, etc.?	☐	☐	☐	122
20.	Is the discharged water to the POTW tested periodically to determine if contaminants used or produced in our facility meet our permit conditions?	☐	☐	☐	122
21.	Are the tests performed by a licensed lab using qualified procedures?	☐	☐	☐	122
22.	Are the results of the testing reviewed to assure that the discharge is within the limits stipulated by agreement with the POTW?	☐	☐	☐	122
23.	Would a pretreatment system for discharge to the POTW lower the level of contaminants and is one available for the levels and types of contaminants?	☐	☐	☐	122
24.	Would recycling the discharge eliminate the need to discharge to POTW and reduce the risk of exceeding limits on contaminants?	☐	☐	☐	122
25.	Have we performed an audit of all current points of discharge to the POTW and reduced the risk of exceeding limits on contaminants?	☐	☐	☐	122
26.	Do we need a Spill Prevention Control and Countermeasure (SPCC) Plan? If so, do we have a current, approved SPCC Plan?	☐	☐	☐	113
27.	When was the SPCC last tested? What deficiencies were noted during the test? What is the status of corrective actions? _____			☐	113
28.	How many reportable spills have we had the past year? Were all spills reported properly? _____			☐	97
29.	Are discharge monitoring reports (DMR) used at the facility and submitted to the appropriate agency or authority on schedule?	☐	☐	☐	122
30.	Do we have any soil erosion or sediment non-point pollution problems?	☐	☐	☐	122
	<u>Natural Resource Management and Historic and Cultural Resource Management</u>				
1.	Do we have any wetlands or floodplains? How do we know this? When was the property inventoried/delineated?	☐	☐	☐	47/ 125
2.	Do we have any Section 404 wetlands, dredge, or fill permits pending from the Corps of Engineers?	☐	☐	☐	125

		YES	NO	N/A	Page*
3.	Does the unit contain sites of cultural, archeological/historical significance? When was the property inventoried? (e.g., historic buildings, prehistoric archeological sites, Indian religious sacred sites, community lifeways, etc.? _____	☐	☐	☐	55
4.	Are there any projects or actions planned which may affect archeological, or historic or cultural resources?	☐	☐	☐	55
5.	Are there any fish, wildlife or plants listed by the Federal or state governments as threatened or endangered in our local area? If so, what are they? What precautions are needed to protect them during our activities?_____	☐	☐	☐	35/68
6.	Do we use native plants for all landscaping?	☐	☐	☐	61
	Environmental Planning and Documentation				
1.	Are there any new actions/construction underway or scheduled for the unit?	☐	☐	☐	69
2.	Were there any environmental issues? How were they resolved?	☐	☐	☐	69
3.	Has the unit become aware of any ongoing actions that are having or could have a potentially significant affect on the environment?	☐	☐	☐	69
4.	Is the unit currently in the process of preparing NEPA documentation?	☐	☐		69
5.	Are there minority or low-income populations which may be affected by actions undertaken by the unit?	☐	☐		44☐

Questions for Your Legal Support Organization

		YES	NO	N/A
1.	Is there coordination among key environmental personnel (i.e., MLCs, CEUs, District Legal Offices, G-LEL, NESU, G-SEN, G-SEC) concerning environmental issues?	☐	☐	☐
2.	Has the legal office reviewed our environmental permits?	☐	☐	☐
3.	Are there on-site hazardous waste sites or other sites not in compliance with environmental statues?	☐	☐	☐
4.	Has the legal office coordinated the unit's remedy with the EPA?	☐	☐	☐

		YES	NO	N/A
5.	Does the legal office receive copies of NOVs and NONs?	☐	☐	☐
6.	Is the legal office involved in negotiations for compliance agreements?	☐	☐	☐

Questions for Your Public Affairs Support Organization

		YES	NO	N/A
1.	Is a public relations plan in place for emergency environmental events that may occur at the unit?	☐	☐	☐
2.	How is our environmental program perceived in the community?_____			
3.	What is our relationship with local officials regarding environmental issues?_____			
4.	What is our relationship with the media on environmental issues?_____			
5.	What types of communication are being used to inform the public about our environmental program?_____ _____ __			
6.	Are there good news stories from the environmental staff that can be released to the local media or Coast Guard Headquarters?	☐	☐	☐
7.	Do we have a public involvement and response plan? Is it being implemented?	☐	☐	☐
8.	What actions are we taking to increase environmental awareness of the workforce? Does the new employee briefing cover environmental issues?_____			
9.	Are any organized environmental groups interested in our unit? Who are they and what is our relationship with them?_____			
10.	Are we involved in any community environmental endeavors or projects? What are they?_____	☐	☐	☐

Questions for Cutter Commanders

		YES	NO	N/A	Page*
	Overall Facility Program				
1.	Who is our primary environmental contact in the office of the Chief, Office of Naval Engineering?_____				
2.	Is our cutter in compliance? (May answer after completing all questionnaires)	☐	☐	☐	
3.	Do we have sufficient staff and resources to ensure environmental compliance?	☐	☐	☐	40

		YES	NO	N/A	Page*
4.	Have all personnel who require it received proper environmentally-related training?	☐	☐	☐	116
5.	Have all our people been properly trained to do their jobs (including environmental awareness and pollution prevention)?	☐	☐	☐	116
6.	Has all regulatory-mandated training been completed and records retained?	☐	☐	☐	116
7.	Are the records of the testing maintained in a retrievable fashion and protected from accidental destruction?	☐	☐	☐	104

General Environmental Compliance

1.	What Notices of Violations (NOVs) or other regulatory enforcement orders have we received during the past year? During the past five years? _____ _____			☐	73
2.	What NOVs or other enforcement orders are still outstanding? _____ _____			☐	73
3.	Do we currently have any Compliance Agreements or Consent Orders?	☐	☐	☐	73
4.	Do we have a positive working relationship with the regulatory agencies?	☐	☐	☐	
5.	What environmental Current Ships Maintenance Projects (CSMPs) have we submitted? _____			☐	120
6.	When was our last regulatory agency inspection done? _____			☐	120
7.	Have we had an Environmental Compliance Evaluation (ECE) within the past 3 years? By whom? What deficiencies were found? What is being done to correct those deficiencies? _____ _____				40

Hazardous Waste Management Program

1.	Has a hazardous waste inventory been performed?	☐	☐	☐	50
2.	How much and what type of hazardous waste do we generate each month? _____ _____			☐	50
3.	Do we use or store any Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) listed materials?	☐	☐	☐	50
4.	Is the unit a Conditionally Exempt Small Quantity Generator (CESQG), Small Quantity Generator (SQG), or Large Quantity Generator (LQG)?	☐	☐	☐	50
5.	Do we need and have an Environmental Protection Agency (EPA) ID number?	☐	☐	☐	50

		YES	NO	N/A	Page*
6.	Do we have a designated appropriate Hazardous Waste Manager/Pollution Prevention Coordinator for hazardous materials and waste?	☐	☐	☐	50
7.	Does our HW management plan and RCRA contingency plan include the current organization, business practices and personnel?	☐	☐	☐	50
8.	Do we have a host-tenant agreement with host units?	☐	☐	☐	50
9.	Are the following documents, (1) manifests and signed copies from received facilities, (2) biannual reports, (3) exception reports, (4) test results maintained for the three years required?	☐	☐	☐	104
10.	*Personnel Requirements*				
11.	Has the Hazardous Waste Coordinator been trained within 6 months of his/her designation and retrained annually?	☐	☐	☐	116
12.	Does he/she know the reportable quantity levels for a substance spill/release?	☐	☐	☐	97
13.	Are the appropriate employees trained in the handling of hazardous materials and waste and are proper records maintained as documentation?	☐	☐	☐	104/ 116
14.	Do job descriptions exist for each position including the amount of training required for the position?	☐	☐	☐	116
15.	Are notification procedures implemented to inform employees of potential exposure to hazardous substances?	☐	☐	☐	50
16.	Are personnel protective devices, clothing, gloves, etc., readily available to employees handling hazardous substances?	☐	☐	☐	50
17.	Are employees informed of their right to information concerning substances in their workplace?	☐	☐	☐	50
18.	Are Material Safety Data Sheets (MSDSs) for our raw materials and process streams kept on file?	☐	☐	☐	50
19.	Are the MSDSs for the raw materials available to the employees and employee physician upon request?	☐	☐	☐	50
20.	*Hazardous Waste Storage*				
21.	Are the storage areas identified and protected with security barriers and secondary containment equal to the largest container?	☐	☐	☐	50
22.	Is any volume of hazardous wastes stored on the vessel for more than 90 days? (Storage of hazardous waste for more than 90 days may be of concern, depending on the quantity.) How long is the waste stored at the site? _____	☐	☐	☐	50
23.	Are storage containers marked in accordance with DOT *requirements?*	☐	☐	☐	50

		YES	NO	N/A	Page*
24.	Are all containers used for paints, solvents, cleaning fluids, fuels, etc. clearly marked and of the proper type?	☐	☐	☐	50/86
25.	Are written procedures in effect for periodic inspection of hazardous material containment? Are the inspections up to date and documentation retained?	☐	☐	☐	50/86
26.	Is a spill reporting procedure in place? (see *Emergency Response*)	☐	☐	☐	42/76/97
27.	Are records kept of the volume and location of all hazardous substances?	☐	☐	☐	104
28.	*Hazardous Waste Disposal*				
29.	Are waste streams properly segregated?	☐	☐	☐	50/110
30.	Are hazardous wastes mixed with non-hazardous wastes? (A "yes" answer may be of concern.)	☐	☐	☐	50/110
31.	Are hazardous waste manifests being properly filled out and filed?	☐	☐	☐	50
	Noise				
1.	Do we have proper warnings of noise hazards on board?	☐	☐	☐	71
2.	Do we operate in noise sensitive areas?	☐	☐	☐	71
3.	Do we restrict operation of noise producing equipment to daylight hours when in port?	☐	☐	☐	71
	Clean Air Program				
1.	Does the cutter operate in EPA designated air pollution non-attainment areas?	☐	☐	☐	23
2.	Are we in compliance with Status of Forces Agreements (SOFAs) for air emission standards when operating in the territorial seas of foreign governments?	☐	☐	☐	23
3.	Have we taken steps to reduce unnecessary stack emissions?	☐	☐	☐	23
4.	Does the unit use any ozone depleting substances (ODSs)? Is ODS recycling taking place?	☐	☐	☐	79
	PCBs				
1.	Does the cutter have equipment that contains PCBs?	☐	☐	☐	90
2.	Has an Interim Measures Inspection Program been initiated?	☐	☐	☐	90
3.	Has equipment containing PCB's been properly labeled?	☐	☐	☐	90
	Emergency Response				

		YES	NO	N/A	Page*
1.	Does our Environmental Emergency Response Plan contain provisions to comply with the Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), Clean Air Act (CAA), and Occupational Safety and Health Act (OSHA)?	☐	☐	☐	42/76/ 97
2.	Does our unit participate in an Emergency Planning and Community Right-to-Know Act (EPCRA) program?	☐	☐	☐	42/76/ 97
3.	What Coast Guard and private sector resources are available for responding to discharges of oils and hazardous substances? What is their response time? How much and what type of response resources (people and equipment) can they provide in a specific time? _____ _____				42/76/ 97
4.	Who is the qualified individual authorized to implement the Emergency Response Plan? Who on the cutter is the designated Coordinator in case of an emergency?_____ _____				42/76/ 97
5.	Are key personnel identified in the Emergency Response Plan who have responsibility and authority to react to any spill emergency?	☐	☐	☐	42/76/ 97
6.	Have the key personnel been made aware of their responsibility and liabilities with regard to notification in case of an accidental spill?	☐	☐	☐	42/76/ 97
7.	Have all personnel on the cutter received training with regard to emergency environmental procedures? Has the training of personnel been documented with their acknowledgment indicated?	☐	☐	☐	42/76/ 97
8.	Are drills run and training periodically updated through drills or other methods?	☐	☐	☐	42/76/ 97
9.	Are warning signs and emergency procedures posted on the cutter as part of the implementation of the plan?	☐	☐	☐	42/76/ 97
10.	If a reportable release occurs, does the cutter have the following information as part of its record keeping: substance spilled, date, volume, cause, corrective actions taken, plans for prevention?	☐	☐	☐	42/76/ 97
11.	Have arrangements been made with local hospitals to accommodate possible injuries from environmental emergencies?	☐	☐	☐	42/76/ 97
	Pollution Prevention				
1.	Do we have a waste minimization program to reduce the amount of hazardous and non-hazardous materials used and waste disposed?	☐	☐	☐	86
2.	Do we have a Pollution Prevention Plan? If so, are we implementing it?	☐	☐	☐	86
3.	Have we conducted a pollution prevention opportunity assessment?	☐	☐	☐	86

		YES	NO	N/A	Page*
4.	Do we have any pollution prevention projects submitted for funding? What is their status?_____	☐	☐	☐	86
5.	Do we track HAZMAT procurement, use, and inventory?	☐	☐	☐	86
6.	Do we have an Authorized Use List? If so, do we update it and how often?_____	☐	☐	☐	86
7.	Do we regularly review our procurements to determine whether we can substitute recycled or recyclable products?	☐	☐	☐	86
8.	Have we prepared a recent P2 report for HQ G-SEC-3?	☐	☐	☐	86
9.	Do we have a recycling program? What additional items could be recycled?_____	☐	☐	☐	86
10.	Do we have any cooperative environmental programs with other organizations (such as resource recovery or recycling)?	☐	☐	☐	86
	Water Quality				
1.	Is our cutter's potable water system meet proper standards?	☐	☐	☐	31
2.	Are four samples from the cutter's potable water system tested monthly for bacteria?	☐	☐	☐	31
3.	Is sewage properly segregated from graywater?	☐	☐	☐	74